August 7, 2020

Second Supplement to Memorandum 2020-7

Sentencing Topics and Trends, Including Recent Changes to California Law and Effects on Public Safety: Overview and Panelist Materials

The Committee on Revision of the Penal Code met by teleconference on June 24, 2020. After hearing from a panel of witnesses about sentencing issues, the Committee heard public comment. Since the June meeting, staff has received additional material from one of the public commenters, Joanne Scheer, and an email from Sheila Pinkel, who had technical issues in making public comment. Ms. Scheer's letter and material is attached as Exhibit A; Ms. Pinkel's email is Exhibit B.

The sole purpose of this supplement is to place those materials in the Committee's record. **No Committee action is required with regard to this supplement.** This supplement will be posted to the Committee's website and distributed to its electronic mailing list, but will not be part of the materials considered at a future meeting.

Respectfully submitted,

Thomas M. Nosewicz
Senior Staff Counsel

Exhibit A

June 26, 2020

Mr. Michael Romano
Committee on Revision of the Penal Code
c/o UC Davis School of Law
400 Mrak Hall Drive
Davis, CA 95616

Re: Penal Code 190.2 Special Circumstances

Dear Mr. Romano and Members:

The DropLWOP Coalition wishes to thank you, members of the Committee, for undertaking the monumental task of studying and recommending statutory reforms to California's penal code. We hope your work will bring us closer to a system of justice and equality with rehabilitation and reentry the goal for all people regardless of offense. Toward this end, we earnestly request that you address California's Penal Code 190.2 Special Circumstances; particularly 190.2(b),(c), and (d) which is known as felony murder special circumstances.

Senator Nancy Skinner made history when she championed Senate Bill 1437 which addressed accomplice liability for felony murder. When this bill was signed into law by Governor Jerry Brown in October, 2018, a precedent was set in California which recognized that a person should be punished only for his or her actions according to his or her own level of individual culpability. One hundred and fifty years of draconian law was repealed, as much as was possible, by an informed and enlightened legislature. It is time to build on the precedent set forth by SB 1437 by addressing Penal Code 190.2 Special Circumstances, particularly in light of the recent decision of the California Supreme Court in *In re Willie Scoggins*[1], a case which expanded upon the decisions in *People v. Banks* (61 Cal.4th)[2] and *People v. Clark* (63 Cal.4th 522 (2016))[3] and addressed the *actus reus* and *mens rea* aspects in reviewing challenges to felony murder special circumstance findings and the imposition of life without parole sentences for aiders and abettors.

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[1] In re Willie Scoggins (S253155, Jun 25, 2020), Supreme Court of California Decision, Opinion by Liu, with Cantil-Sakauye, Chin, Corrigan, Cuellar, Jruger, Groban concurring.

[2] SCOCAL, People v. Banks , S213819 available at: (https://scocal.stanford.edu/opinion/people-v-banks-34425) (last visited Monday June 29, 2020).

[3] https://www.leagle.com/decision/incaco20160627061

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A Brief History

On November 7, 1978, 72% of California's voters approved the Briggs Initiative, Proposition 7, which greatly expanded the kinds of cases in which the death penalty could be imposed. The Briggs Initiative replaced California's 1977 death penalty law which had been drafted by then-State Senator George Deukmejian.

To conform to the various capital punishment guidelines established by the United States Supreme Court, the Deukmejian and Briggs laws have three key elements in common:

1. A defendant must be convicted of an offense which carries a possible death penalty (first degree murder, treason, train-wrecking, etc.);
2. It must be determined that a defendant convicted of first degree murder committed the crime in conjunction with one of the many pre-defined "special circumstances";
3. If any of the special circumstances are found to be true, the convicted person must receive a sentence of either life in prison without possibility of parole or the death penalty.[4]

Gerald F. Uelmen states that "under the 1977 Deukmejian law, it was crystal clear that no one could be sentenced to death unless he intended to kill the victim. While one who only aided another in committing a felony could be convicted of first-degree murder, the 1977 law required that he had to be personally present and ***intend the death*** (emphasis added) before special circumstances could be found. On this crucial point the Briggs initiative muddied the water."[5] Two of its clauses contradicted each other; one clause listed the underlying crimes that would trigger the felony murder rule, but did not specify that intent was necessary,[6] while another clause mandated that prosecutors prove intent-to-kill in felony murder cases in order to convict for first degree murder.[7] This ambiguity seems to have resulted in an increased number of false convictions.[8]

1977	**1978**
1977's death penalty law made it clear that no one could be sentenced to life without parole or death for first degree murder unless he or she intended to kill the victim.	Proposition 7, the Briggs Initiative, was passed by California voters in 1978 and replaced California's death penalty law. Life without the possibility of parole sentencing was put into effect.

[4] http://www.rosebirdprocon.org/pop/DeathPen.htm
[5] "Death Penalty: Blame Briggs, Not Court" by Gerald F. Uelmen, April 22, 1986
[6] California Penal Code 190.2(a)(17)
(https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=190.2.&lawCode=PEN)
[7] California Penal Code 190.2(b)
(https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=190.2.&lawCode=PEN)
[8] One legal analyst's comparison of death penalty appeals found that the California Supreme Court upheld special-circumstances convictions (whether for felony murder or murder), won under the 1977 law, 75 percent of the time, while special-circumstances convictions won under the 1978 law were only upheld 25 percent of the time. Uelmen, Gerald F. "Death Penalty: Blame Briggs, Not Court," *Los Angeles Times* (April 22, 1986) (https://www.latimes.com/archives/la-xpm-1986-04-22-me-1499-story.html; last accessed 3/18/20

In 1990, two ballot initiatives were presented to California voters which would amend Penal Code 190.2: Proposition 114 and Proposition 115. Almost all of the changes presented in Proposition 114 were nonsubstantive.[9] The sole substantive change appeared in paragraph (7) of subdivision (a), the "peace officer special circumstance" provision adding new categories of peace officers (school police, transportation police, utility security officers, fire investigators) to the list of those whose deaths can trigger a death penalty sentence for the perpetrator.[10]

In contrast to the narrow scope of Proposition 114, Proposition 115 was a wide-ranging measure designed to *make* ***"numerous significant and complex changes in criminal law and in the judicial procedures that must be followed in criminal cases."***[11] Six substantial constitutional changes were proposed in this measure concerning postindictment preliminary hearings, independent construction of state constitutional rights, the People's rights to due process and speedy trial, joinder and severance of cases, hearsay testimony at preliminary hearings, and "reciprocal" discovery procedures. In addition, the measure also proposed to repeal, amend, and add provisions to numerous statutes found in the Code of Civil Procedure, the Evidence Code, and the Penal Code (two of which were Penal Codes 189 felony murder and 190.2 special circumstances).[12]

For our purposes, of greatest importance were Proposition 115's proposed amendments to Penal Code 190.2(a) and (b) and the proposed addition of subdivisions (c) and (d). Subdivision (a) was amended to delete the requirement that special circumstances be "charged and specially" found.

A substantive change to Subdivision (b) was proposed:

1. It deleted the first sentence of the former subdivision (b): "Every person whether or not the actual killer found guilty of ***intentionally*** (emphasis added) aiding, abetting, counseling, commanding, inducing, soliciting, requesting, or assisting, any actor ***in the commission of murder*** (emphasis added) in the first degree shall suffer death or confinement in state prison for a term of life without the possibility of parole, in any case in which one or more of the special circumstances enumerated in paragraphs (1), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15), (16), (17), (18), or (19) of subdivision (a) of this section has been charged and specially found under Section 190.4 to be true."[13]
2. It replaced the former subdivision (b) with: "***Unless an intent to kill is specifically required*** (emphasis added) under subdivision (a) for a special circumstance enumerated therein, an actual killer as to whom such special circumstance has been found to be true under Section 190.4 ***need not have had any intent to kill*** (emphasis added) at the time of the commission of the offense which is the basis of the special circumstance in order to suffer death or confinement in state prison for a term of life without the possibility of parole."[14]

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[9] Changes included "gender neutral" language, minor syntactic (e.g., "such defendant" was changed to "the defendant"), grammatical, and punctuation changes were made to Paragraphs (4), (6), (7), (8), (9), (10), (14) and (16).

[10] Yoshisato v. Superior Court (People) (1992). Supreme Court of California Decisions. Opinion by Lucas, C. J., with Penelli, Kennard, Arabian, Baxter and George, J.J., concurring.

[11] Proposition 115 Criminal Law. Initiative Constitutional Amendment and Statute (1990) Analysis by the Legislative Analyst. Proposal. pg. 32. (italics added)

[12] Yoshisato v. Superior Court (People) (1992). Supreme Court of California Decisions. Opinion by Lucas, C. J., with Penelli, Kennard, Arabian, Baxter and George, J.J., concurring.

[13] Proposition 7 (1978) pg. 42.

[14] Proposition 115 (1990) pg. 66.

NOTE: This important change targeted 190.2(a)(17) (felony murder) in that this special circumstance, alone, did not have intentional killing as a requirement. Significantly, it **removed** the requirement of proving intent.

Proposition 115 added subdivision (c) as follows: "Every person not the actual killer who, with the intent to kill, aids, abets, counsels, commands, induces, solicits, requests, or assists any actor in the commission of murder in the first degree shall suffer death or confinement in state prison for a term of life without the possibility of parole, in any case in which one or more of the special circumstances enumerated in subdivision (a) of this section has been found true under Section 190.4."[15]

It also added subdivision (d): "Notwithstanding subdivision (c), every person not the actual killer, who, *with reckless indifference to human life and as a major participant* (italics added), aids, abets, counsels, commands, induces, solicits, requests, or assists in the commission of a felony enumerated in paragraph (17) of subdivision (a), which felony results in the death of some person or persons, who is found guilty of murder in the first degree therefor, shall suffer death or confinement in state prison for life without the possibility of parole, in any case in which a special circumstance enumerated in paragraph (17) of subdivision (a) of this section has been found to be true under Section 190.4."[16]

The nonsubstantive Proposition 114 received more affirmative votes (71.1% in favor, 28.9% against) than the much more substantial, technical, and complex amendments proposed in Proposition 115 (57% in favor, 43% against). Proposition 114 made one simple grammatical change in section 190.2, subdivision (b) while Proposition 115 made substantial fundamental amendments designed to revise the rules relating to the application of the death penalty to a defendant who was not the "actual killer."[17]

Had these two propositions been viewed as conflicting measures as argued in Judge J. Mosk's dissenting opinion in *Yoshisato v. Superior Court (People) (1992)*, Proposition 114 would have prevailed with 71.1% in favor leaving in place the rule relating to the application of the death penalty to a defendant who was not the "actual killer."[18]

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[15] Proposition 115 (1990) pg. 66.

[16] Proposition 115 (1990) pg. 66.

[17] Yoshisato v. Superior Court (People) (1992). Supreme Court of California Decisions. Opinion by Lucas, C. J., with Penelli, Kennard, Arabian, Baxter and George, J.J., concurring.

[18] Yoshisato v. Superior Court (People) (1992). Supreme Court of California Decisions. Opinion by Lucas, C. J., with Penelli, Kennard, Arabian, Baxter and George, J.J., concurring.

THE PROBLEM

1. A person neither has to actually perpetrate, nor intend, a death to receive a sentence of death or life in prison without the possibility of parole.

The California penal code governing "special circumstances" pertaining to first degree murder demands that mandatory capital punishment – that is, the death penalty or a death-in-custody sentence of life in prison without the possibility of parole (LWOP) – be imposed upon a person when a death occurs during the commission of another underlying felony, such as robbery.[19] In order to convict someone of felony murder special circumstances and sentence them to one of these two forms of death penalty, a prosecutor does not have to prove that someone killed intentionally. Furthermore, those convicted do not need to be the actual perpetrators of the killing. As long as a prosecutor can prove they were a major participant in committing one of the thirteen underlying offenses, and that they acted with "reckless indifference", they can be convicted and sentenced to life without parole or the death penalty.

2. A person who did not intend a death, or who did not perpetrate a killing, can be sentenced far more harshly than a person who intentionally and with premeditation killed another.

While felony murder does not require a prosecutor to prove that a defendant killed anyone, intentionally or not, it can be punished more severely than first degree murder, which requires a prosecutor to prove a defendant intentionally, willfully, and maliciously perpetrated a killing. The minimum sentence for an intentional first degree murder is 25 years to life, while the minimum sentence for felony murder special circumstances is either the death penalty or LWOP.[20]

3. Prosecutors have sole discretion as to whether or not to charge special circumstances. In other words, they have sole discretion over the life or death of a defendant.

These felony murder provisions lend themselves to capricious and unjust sentencing. While malice for burglary and other offenses clearly does not equal malice for murder, people are being punished as if it does. In addition, the decision to charge someone with special circumstances for felony murder (rather than simply for the underlying felony or for felony murder without special circumstances) is at the ***sole discretion*** of the District Attorney, resulting in inconsistent, unequal, and potentially biased application of this lethal law. Accordingly, the propensity to charge special circumstances varies county by county in accordance to that county's political leanings. To be clear, there is no level of crime that specifically demands the charging of a special circumstance; the determination goes to the district attorney alone.

4. The death penalty and life without the possibility of parole are both death sentences.

Life in prison without the possibility of parole is a death sentence. It is a long, slow, agonizing counting of days, years, decades struggling to survive abuse, violence, loneliness, and guilt while being denied the opportunity to make amends for one's mistakes or to redeem oneself in any way. The U.S. Supreme Court decision in *Graham v. Florida* recognized that defendants who do not kill, intend to kill, or foresee that life will be taken are categorically less deserving of the most serious forms of punishment. Life without parole is the second most severe penalty permitted by law and even though the State does not

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[19] California Penal Code 190.2(a)(17) (https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=190.2.&lawCode=PEN)

[20] California Proposition 115 (1990) pg. 66.

execute the offender sentenced to life without parole, the sentence alters the offender's life by a forfeiture that is irrevocable. A life without parole sentence means a denial of hope; it means that good behavior and character improvement are immaterial; it means that whatever the future might hold in store for the mind and spirit of the one sentenced, that person will remain in prison for the rest of their days.[21]

5. The largest number of people sentenced to death are youth under the age of 25.

19 years is the average age of a person at the time of the crime for which he or she receives a life without parole sentence due to a special circumstance finding. In California, as of July 31, 2018, there were **5,206** people serving life without parole sentences, **3,711** of whom were first time offenders, and **3,221** who were *25 or under* at the time of the offense. People of color are disproportionately sentenced as evidenced by the fact that 68% of the 5,206 people sentenced to LWOP in California are Black or Hispanic.[22] The overwhelming majority of women serving a life without parole sentence are survivors of abuse, including intimate partner battering, childhood abuse, sexual violence and sex trafficking. These numbers should shock the senses.

6. Youth sentenced to life without parole are excluded from youth offender bills simply because of their sentence.

California legislators have recognized the conclusions made by neurological research that the human brain in not fully developed until the age of 25. Young people simply do not have adult levels of judgment, impulse control, or the ability to foresee the consequences of their actions. Passage of Senate Bill 261 regarding youth offender parole hearings in 2015 required the Board of Parole Hearings to conduct a youth offender parole hearing for offenders sentenced to state prison who committed those specified crimes when they were under 23 years of age. Assembly Bill 1308, passed and chaptered in 2017, increased the age from 23 to 25 years for youth offender parole hearings to align California law with these basic scientific truths.

SB 261 and AB 1308, however, ***excluded*** youth who were sentenced to life without the possibility of parole between the ages of 18-25. Simply put, this exclusion is based solely on the choice made by a prosecutor as to whether or not to charge that youth with a special circumstance; it is ***not*** based on the circumstances of the offense or the character and individual actions of the person. These scientific truths do not change based on the length of a prison sentence; however, California lawmakers have treated them as if they do.

7. Prison overcrowding and the CDCR budget keeps escalating as prosecutors continue their unrestrained use of felony murder special circumstances.

California continues to house incarcerated people in numbers beyond its maximum capacity at an average of 122 percent of capacity, with some institutions as high as 154 percent.[23] Overpopulation remains the main contributing factor to inhumane and poor living conditions in state prisons. Between 2000 and 2017, the share of prisoners age 50 or older more than quintupled, from 4% to 23%. Aging prisoners may be contributing to California's prison health care costs – now highest in the nation at

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[21] *Graham v. Florida* 560 U.S. __(2010)

[22] CDCR. Strategic Offender Management System (SOMS) as of July 31, 2018. CSR#1804-217 (PRA# 13260)

[23] https://www.cdcr.ca.gov/research/wp-content/uploads/sites/174/2020/06/Tpop1d200624.pdf

more than three times the national average and 25% more than in 2010.[24] California's May Budget Revision proposes total funding for the California Department of Corrections and Rehabilitation of $13.4 billion in 2020-21.[25]

The devastating waste of the lives of our youth and the suffering this causes to families and communities continues to grow by the use of felony murder special circumstances. On average, 130 people every year are sentenced to spend the remainder of their lives in prison with no possibility of parole.[26] This demands change.

The felony murder rule has long been the subject of scorn by legal scholars and penological experts because it relieves the prosecution of its burden of proving intent to kill, which is a necessary element of murder. Because felony murder special circumstances sanctions individuals with the most severe sentence of death, whether by execution or incarceration, it is a serious anomaly in our law which ought to be abolished.

Many recent developments in legislative and judicial actions have signaled a move away from the retributive model of criminal justice towards one of rehabilitation and reentry. California lawmakers recognized the demand for liability proportionate to culpability in the passing of SB 1437 (2018). This bill allowed for a minor participant in a felony murder the ability to petition the court to be resentenced to the underlying felony, thereby creating a more proportionate sentence based on any individual involvement in the crime. This recognition and change ***can and must*** be applied to those sentenced to die in prison due to a special circumstance finding.

The Solution

Section 30 of Proposition 115 (1990) states: "The statutory provisions contained in this measure may not be amended by the Legislature *except by statute passed in each house by rollcall vote entered in the journal, two-thirds of the membership concurring* (italics mine), or by a statute that becomes effective only when approved by the electors."[27] In Proposition 115, Penal Code 190.2 subdivision (b) was struck and replaced, and subdivisions (c) and (d) were added; therefore, these subdivisions can be changed by a 2/3 majority vote by the Legislature. As such, Penal Code 190.2 subdivisions (b), (c), and (d) should be stricken and replaced with the original language contained in Proposition 7, Penal Code 190.2 subdivision (b), as it existed in 1978. In the alternative, the elimination of Penal Code 190.2 subdivision (d) of Proposition 115, would eradicate the most egregious misuse of special circumstances as it applies to aiders and abettors who neither killed nor acted with intent to kill.

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[24] https://www.ppic.org/publication/californias-prison-population/
[25] http://www.ebudget.ca.gov/2020-21/pdf/Revised/BudgetSummary/PublicSafety.pdf
[26] CDCR Office of Research, Offender Demographics and Census, Admissions by Sentence Type
[27] Proposition 115 Criminal Law. Initiative Constitutional Amendment and Statute. (1990)

Due to its harsh sentencing, one assumes that people who are convicted of a special circumstance and serving a life without parole sentence are the "worst of the worst" and that the crimes, themselves, are the most egregious. This is a false assumption. As stated above, California sentences someone who intentionally and with malice aforethought kills another and judges that person worthy of rehabilitation and redemption, affording them the opportunity to someday reenter society. How do we compare this with the cost to someone whose sole intent is to commit a robbery, for instance, and who had no intent to harm another? If an intentional death occurs at the hands of a codefendant during a robbery and that person's intentions were unknown to the others, should the cost be death for those who didn't kill? How do we compare the basic human need of proving ourselves worthy of a second chance, particularly as a youth, with the hopelessness and despair of knowing we aren't even worthy of a burial plot? How can we condone the continuation of this most extreme and inhumane punishment?

In November and December of last year, some members of the DropLWOP Coalition conducted meetings with the Public Safety Committee members from each house, and/or their staff, to discuss a proposed resolution regarding felony murder special circumstances and life without parole sentencing. There were six people in our member group, each of whom represented a family member convicted of a special circumstance and serving a life without parole sentence. We polled ourselves asking how many codefendants were involved in the crime for which our loved one is serving LWOP. We represented six different circumstances in which a death occurred at the hand of one person. The number of defendants in these six cases totaled 23. Twenty-three youths received the death sentence of life in prison without the possibility of parole. . .that is a 4 to 1 ratio. This is ***not*** an anomaly. These are our children, our brothers and sisters, mothers and fathers. These are people whose families have also been sentenced to death. Their hopelessness is our hopelessness, their sentence, ours.

We appreciate the daunting work that Governor Newsom has apportioned to this Committee and we recognize the courage you've shown in its undertaking. We strongly and urgently request that you place felony murder special circumstances, Penal Code 190.2(b), (c) and (d), on your agenda and allow us the opportunity to have an open and honest discussion around this unethical and lethal law.

We greatly appreciate your consideration and hopefully look forward to the opportunity to meet. Please consult the attached documents for further information. Should you have questions, please contact Joanne Scheer at Felony Murder Elimination Project's email: felonymurderproject@yahoo.com or by phone at 925-285-1504.

Sincerely yours,

Joanne Scheer

Joanne Scheer

On Behalf of the **DropLWOP Coalition**:
Californians United for A Responsible Budget (CURB)
California Coalition for Women Prisoners (CCWP)
FUEL – Families United to End LWOP
Felony Murder Elimination Project

UNEQUAL PUNISHMENT: REPEALING FELONY MURDER SPECIAL CIRCUMSTANCES

BY JOANNE SCHEER

Author Joanne Scheer at the 2018 Drop LWOP rally.

The California penal code governing "special circumstances" pertaining to first-degree murder demands that mandatory capital punishment—that is, the death penalty or a death-in-custody sentence of life in prison without the possibility of parole (LWOP)—be imposed upon a person when a death occurs during the commission of another underlying felony, such as robbery.[1] In order to convict someone of "felony murder special circumstances," and sentence them to one of these two forms of death penalty, a prosecutor does not have to prove that someone killed intentionally. Furthermore, those convicted do not need to be the actual perpetrators of the killing. As long as a prosecutor can prove they were a major participant in committing one of the 13 underlying offenses, and that they acted with "reckless indifference," they can be convicted.

WHILE FELONY MURDER does not require a prosecutor to prove that a defendant killed anyone, intentionally or not, it can be punished more severely than first-degree murder, which requires a prosecutor to prove a defendant intentionally, willfully, and maliciously perpetrated a killing. The minimum sentence for an intentional first-degree murder is 25 years to life, while the minimum sentence for felony murder special circumstances is either the death penalty or LWOP.[2]

This particularity of California criminal law thus relegates people convicted of felony murder to staggeringly disproportionate sentences. It also has particularly detrimental effects on women and on transgender and gender non-conforming people. Many of the over 200 women and transgender people in California women's prisons serving LWOP were sentenced as aiders and abettors with special circumstances, including under the felony murder rule. The majority of incarcerated women and transgender people were themselves survivors of abuse, such as intimate partner violence, child abuse, sexual violence, and trafficking.[3,4]

The passage of California Senate Bill 1437 in 2018 has limited the conditions under which defendants can be convicted and subsequently sentenced as aiders and abettors in certain felony murder cases.[5] However, further reform is urgently needed to fully abolish felony murder special circumstances and thereby ensure consistency in California sentencing law.

PROBLEM DESCRIPTION

The particularities of California's penal code have created a situation in which those convicted of committing felony murder, whether or not the death was intentional, could suffer harsher punishments than those convicted of intentional first-degree murder. The minimum penalty for first-degree murder in California is 25 years to life. However, the California Penal Code contains provisions that enumerate 22 special circumstances under which those who have been convicted of first-degree murder *must* serve a minimum sentence of LWOP or the death penalty.[6] All but one of these 22 provisions requires that the killing be intentional. The exception allows for defendants who are convicted of felony murder with special circumstances, regardless of whether they were the actual killer or whether the killing happened intentionally, to be sentenced to LWOP or the death penalty. Thus, those convict

ed of intentional first-degree murder without a special circumstance can be sentenced to 25 years to life, but those convicted of felony murder with special circumstances, whether or not they intended for the death to happen, *must* be sentenced to LWOP or the death penalty.

While the legal theory of felony murder has existed for many years, originating in 18th century England, ballot initiatives passed in California in the last four decades have expanded the number of special-circumstance crimes for felony murder, and first weakened and then removed the necessity of proving intent, thus precipitously expanding the number of people convicted under felony murder.

The 1977 death penalty law made it clear that no one could be sentenced to LWOP or death for first degree murder unless that person intended to kill the victim.[7] While one who only aided another in committing a felony could be convicted of first-degree murder, the 1977 law required that person be physically present and intend the death before special circumstances could be found.[8] In 1978, voters passed Proposition 7, which replaced that more specific language with the much broader and more ambiguous "intent to kill."[9] In addition, in the case of felony murder, Proposition 7 contained two contradictory clauses that introduced ambiguity around the necessity of proving intent. One clause listed the underlying crimes that would trigger the felony-murder rule, but did not specify that intent was necessary,[10] while another clause mandated that prosecutors prove intent-to-kill in felony murder cases in order to convict for first-degree murder.[11] This ambiguity seems to have resulted in an increased number of false convictions.[12]

Proposition 115, The Crime Victims Justice Reform Act, passed in 1990, removed that ambiguity once and for all by making it possible to convict without proof of intent. Proposition 115 mandated that those aiders/abettors who acted with "reckless indifference to human life and as a major participant" could also be convicted of first-degree felony murder, removing the requirement of intent.[13]

Recent legislation has limited, but not eliminated, the basis for felony-murder convictions. SB 1437 (2018) allows a person previously convicted of second-degree felony murder (for being an accomplice under the felony-murder rule), or through the "natural and probable consequences" theory of law, to petition their original court of conviction for a resentencing to the underlying felony only.[14] It also allows those currently undergoing trial a similar basis for challenging the charge of felony murder. Natural and probable consequences is a legal theory that asserts culpability if it can be proven that an aider/abettor could have reasonably foreseen that a death could occur as a direct result of the underlying crime. Though district attorneys across California have challenged the constitutionality of SB 1437 in the courts, such cases have slowed, but not prevented, the application of the new statute. A number of petitioners have been released under the new statute, most notably Adnan Khan, the first person released under the new law, and the co-founder of Re:Store Justice, the criminal justice reform organization that spearheaded SB 1437.[15]

As encouraging as these instances are, there is still much work to be done to eliminate the felony-murder category altogether. SB 1437 does not apply to everyone convicted of felony murder special circumstances, only those who were prosecuted and convicted of second-degree felony murder as an aider/abettor or under the natural and probable consequences doctrine. Those who were convicted of felony murder with a special circumstance as a major participant, or as acting with reckless indifference to human life; as the actual perpetrator of the killing; as an aider/abettor with the intent to kill; or if the person killed was a police officer in the performance of his or her duties, are not eligible for resentencing under SB 1437.

CRITIQUE

These felony-murder provisions lend themselves to capricious and unjust sentencing. While malice for burglary and other offenses clearly does not equal malice for murder, people are being punished as if it does. In addition, the decision to charge someone with special circumstances for felony murder (rather than simply for the underlying felony or for felony murder without special circumstances) is at the sole discretion of the District Attorney, resulting in inconsistent, unequal, and potentially biased application of this lethal law.

Felony murder violates key tenets of the state's own definition of appropriate punishment. In the *People v Dillon* (1983) decision, the California Supreme Court states that "the state must exercise its power to prescribe penalties within the limits of civilized standards and must treat its members with respect for their intrinsic worth as human beings." It further states, "punishment which is so excessive as to transgress those limits and deny that worth cannot be tolerated." They conclude that a punishment may violate the California constitutional prohibition "if, although not cruel or unusual in its method, it is so disproportionate

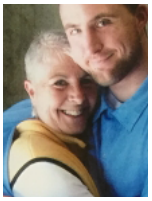
to the crime for which it is inflicted that it shocks the conscience and offends fundamental notions of human dignity."

The United States is one of the few countries in the world to use the felony-murder rule.[16] Acknowledging the capriciousness and unfairness of this rule, England, its country of origin, abolished the felony-murder rule in 1957.[17] Various states in the United States have also abolished the felony-murder rule, including Hawaii, Kentucky, Michigan, Ohio, and New Hampshire.[18]

RECOMMENDATIONS

We recommend that the California Penal Code be amended to abolish special circumstances penalties for felony murder, so that the criteria of proving intent-to-kill is consistent with all other determinations of the charge of murder, regardless of whether or not the deaths happened during the commission of an underlying felony. This would require abolishing those aspects of the California Penal Code that punishes people convicted of felony murder regardless of intent, that is, Penal Code 190.2(b), 190.2(c), and 190.2(d).[19]

These changes to the Penal Code could only be implemented via a ballot initiative or a two-thirds majority vote in the state legislature. Proposition 7 and Proposition 115, which established the current statutes governing felony murder special circumstances, were ballot initiatives. Changes to Proposition 7 that abolish felony murder special circumstances altogether require another ballot initiative. Abolishing the sections of the Penal Code that punish those convicted of felony murder special circumstances without intent-to-kill means changing certain portions of Proposition 115. Proposition 115 was written so that it could be changed by either a ballot initiative or a two-thirds majority vote in the legislature. Anticipating the difficulty of garnering enough support to win a two-thirds majority vote or to win a ballot initiative, the authors of SB 1437 only changed language not directly specified in either proposition. As such, the main provisions defining felony murder special circumstances, i.e. intent-to-kill or "acting with reckless indifference and as a major participant," remain unchanged by SB 1437. We therefore recommend introducing legislation, passed by a two-thirds majority, to abolish sections of the California penal code that punish people convicted of felony murder special circumstances regardless of intent to kill.



Joanne Scheer *is the founder of the Felony Murder Elimination Project, a growing group of concerned citizens whose goal is the elimination of the felony murder rule from California law. When her only child (Tony Vigeant, featured in the picture with his mother) was convicted under the felony murder rule and sentenced to the death sentence of life in prison without the possibility of parole, she began the work of bringing an end to one of the most heinous of California's laws. Striving not only to eliminate the felony murder rule, the Felony Murder Elimination Project endeavors to bring relief to those who are serving harsh and disproportionate sentences imposed by the rule's application.*

With nothing but the resolve to eliminate a law that so easily and unjustly sentences youth to death, she sponsored Assembly Bill 2195 in 2016, co-sponsored Senate Concurrent Resolution 48 in 2017, and co-sponsored Senate Bill 1437 in 2018, which virtually eliminated second-degree felony murder and the natural and probable consequences doctrine. She continues to fight for the elimination of first-degree felony murder and special circumstances.

RECOMMENDED READING

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NOTES

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2. "Proposition 115: the Crime Victims Justice Reform Act, (1990)," Ballotpedia, accessed May 20, 2020, 66, https://ballotpedia.org/California_Proposition_115,_the_%22Crime_Victims_Justice_Reform_Act%22_(1990).

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9. "California Proposition 7: The Death Penalty Act, 1978," Ballotpedia, accessed May 20, 2020, https://ballotpedia.org/California_Proposition_7,_the_Death_Penalty_Act_(1978).

10. California Penal Code, Part 1, Title 8, Chapter 1, Section 190.2(a)(17) Homicide, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=190.2.&lawCode=PEN.

11. California Penal Code, Part 1, Title 8, Chapter 1, Section 190.2(b) Homicide, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=190.2.&lawCode=PEN.

12. One legal analyst's comparison of death penalty appeals found that special-circumstances convictions (whether for felony murder or murder) that were won under the 1977 law, were upheld by the California Supreme Court 75 percent of the time, while special-circumstances convictions won under the 1978 law were only upheld 25 percent of the time. Uelman, Gerald F., "Death Penalty: Blame Briggs, Not Court," *Los Angeles Times,* April 22, 1986, https://www.latimes.com/archives/la-xpm-1986-04-22-me-1499-story.html.

13. "Peace Office Hearsay Testimony Pursuant to the Crime Victims Justice Reform Act," Commission on Peace Officer Standards and Training, accessed May 20, 2020, https://post.ca.gov/Proposition-115-Peace-Officer-Hearsay-Testimony-Pursuant-to-the-Crime-Victims-Justice-Reform-Act.

14. SB1437: Accomplice liability for felony murder, California Legislative Information (2018), https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1437.

15. McKenney, Hope, "'My Intention Was Not To Kill: Adnan Khan First to Be Released from Prison Under New Law," *KQED News,* January 25, 2019, accessed 1/31/2020, https://www.kqed.org/news/11720792/my-intentions-were-not-to-kill-adnan-khan-is-first-to-be-released-from-prison-under-new-law.

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19. California Penal Code Part 1, Title 8, Chapter 1, Sections 190.2(b), 190.2(c), and 190.2(d) Homicide. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=190.2.&lawCode=PEN.

Felony Murder Special Circumstances

California Penal Code 190.2(a)(17) special circumstances demands a mandatory capital punishment – the *death penalty* or a death-in-custody sentence of *life in prison without the possibility of parole* (LWOP) – be imposed upon a person when a death occurs, either accidental or intentional, during the commission of another offense. To be convicted of a special circumstance and sentenced to one of these two death penalties, a defendant need not be the actual perpetrator of the death; he/she needs only to be proven a participant in one of 13 underlying offenses.

- **The death that occurs may be either accidental or intentional**
- **Defendant must only be proven a participant in the underlying offense, not the actual perpetrator of a death**
- **The most common underlying felonies are robbery and burglary**

Felony murder special circumstances requires a prosecutor only prove a defendant's participation in a felony during which a death occurs. Defendant need not be the perpetrator of the death. **Sentence = Death Penalty or Life Without Parole**	**First-degree murder requires a prosecutor to prove a defendant willfully and maliciously perpetrated a killing** **Sentence = 25 years to life**

During a 16 year period, 1992–2008, the population of people serving life without the possibility of parole in the United States grew by 330% - from 12,453 to 41,095[i].

California has the third-highest population of people serving LWOP in the country. Increasing at a shocking pace, close to 400 people were sentenced to this slow and hopeless death between 2015 and 2018[ii].

Who is Serving Life Without the Possibility of Parole in California[iii]?

- **19 years old – most common age at the time of the crime**
- **5,206 people serving life without parole as of July 2018**
- **3,711 of the 5,206 are people with *first-time offenses***
- **3,221 were 25 years or younger at the time of the crime**
- **68% of those serving LWOP are Black and Latinx**

Institutional Discrimination Against Those Serving Life Without Parole Sentences

- **Life without parole (LWOP) is a living death sentence. A person condemned to this sentence will die in prison.**

- **Most people serving life without parole are immediately placed into the highest-security level 4 prisons. Days consist of 23 hours in the cell, 1 hour of yard time.**

- **Those serving life without parole are prohibited from taking part in many rehabilitative programs since those openings are slotted for incarcerated people who have the opportunity to go before the parole board.**

- **People sentenced to LWOP are targeted for induction by prison gangs and pressured by the argument that "you don't have anything to lose since you're not going home anyway." This is particularly troubling as statistics show that the highest percentage of those serving life without parole sentences are first-time "youthful offenders", a highly vulnerable population.**

- **People sentenced to LWOP are placed on closed custody for a period of 5 years. This custody level extremely limits a person's ability to attend most educational, vocational and rehabilitative programs. If they have any disciplinary issues within that 5 year period, they can remain on closed custody for up to 10 years.**

- **Those serving life without parole are disallowed many jobs in prison due to their "higher security" status. Mostly allowed only the lowest-paying jobs, currently $0.08/hour, this creates an inability to purchase necessary food and personal hygiene products.**

- **Restitution fines (55% of which is automatically deducted from an incarcerated person's pay) is set by the court and ranges from $300 up to $10,000+[iv], thereby causing an even greater financial strain on the person and his/her family. As sentencing has gotten harsher over the years, so has the rate of restitution.**

- **People sentenced to LWOP are frequently moved between level 4 prisons which are mostly located in isolated, barren locations. These moves cause great mental, emotional, and financial stress not only on family members who are struggling to stay connected with their loved ones, but on the incarcerated person who must continually re-adapt to unfamiliar and unstable surroundings.**

- **Very recently, some people serving life without parole have been allowed to transfer into lower level prisons after many, many years of self-rehabilitation. Even though considered a low security risk and housed with level 2 populations, they are still treated like people on death row.**

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[i] Ashley Nellis and Ryan S. King of The Sentencing Project. No Exit|The Expanding Use of Life Sentences in America. 9
[ii] California Dept. of Corrections and Rehabilitation. Offender Data Points for the 24-Month Period Ending in June 2018. 45
[iii] California Dept. of Corrections and Rehabilitation. SOMS as of July 31, 2018. CSR#1804-217 (PRA# 13260)
[iv] California Penal Code 1202.4(b)(1)

LEGISLATIVE COUNSEL'S DIGEST

SCR No.
as introduced, _____.
General Subject: Criminal sentencing.

This measure would recognize the need for statutory changes to more equitably sentence offenders in accordance with their involvement in the crime and the need to rectify the fundamental contradiction between the concept of rehabilitation and the irredeemable sentence of life in prison without the possibility of parole.

Fiscal committee: no.

WHEREAS, The felony-murder rule was first applied in England in the 1700s and was brought to the United States in the early 1800s. After much criticism from the courts in England due to the disproportionality of sentencing individuals who had no malice or intent to kill in the same manner as perpetrators of the fatal act, Parliament abolished the felony-murder rule in 1957; and

WHEREAS, The United States is one of the few countries in the world that still prosecutes individuals under the felony-murder rule; and

WHEREAS, The felony-murder rule, as to an aider and abettor, imposes liability without culpability. The aider and abettor does not possess the requisite intent to kill as in traditional murder statutes; and

WHEREAS, In cases not prosecuted under a felony murder theory, a jury must find beyond a reasonable doubt that the defendant acted with intentional malice and forethought in order to convict the defendant of first-degree murder. A first-degree murder conviction may result in a sentence of 25 years to life, life without the possibility of parole, or death; and

WHEREAS, Use of the felony-murder rule in the context of aiders and abettors has been slowly eroded by recent decisions of the United States Supreme Court and our own California Supreme Court; and

WHEREAS, While some reform has been made in California by the passage of Senate Bill 1437 in 2018, which limited convictions and subsequent sentencing in felony-murder cases, further reform is urgently needed to limit convictions and subsequent severe and irredeemable sentencing in felony-murder with special circumstance cases, so that the law of California fairly and consistently addresses the culpability of the individual; and

WHEREAS, In all but 3 of the 22 special circumstances identified in subdivision (a) of Section 190.2 of the Penal Code, a defendant must have perpetrated an intentional killing to be sentenced to death or life in prison without the possibility of parole; and

WHEREAS, Paragraph (17) of subdivision (a) of Section 190.2 of the Penal Code mandates a sentence of death or life in prison without the possibility of parole to be imposed upon a defendant who was engaged in, or was an accomplice in, the commission of, attempted commission of, or the immediate flight after committing, or attempting to commit any one of 13 felonies during which a death, either accidental or intentional, occurs; and

WHEREAS, Subdivision (b) was added to Section 190.2 by Proposition 115 in 1990 and specifies that an actual killer need not have had any intent to kill at the time of the commission of the offense that is the basis of the special circumstance in order to suffer death or confinement in the state prison for life without the possibility of parole. Subdivision (c) was also added, which specified that every person, not the actual killer, who, with the intent to kill, aids, abets, counsels, commands, induces, solicits, requests, or assists any actor in the commission of murder in the first degree shall be punished by death or imprisonment in the state prison for life without the possibility of parole. Finally, Proposition 115 added subdivision (d) to Section 190.2 of the Penal Code, which specifies that "every person, not the actual killer, who, with reckless indifference to human life and as a major participant, aids, abets, counsels, commands, induces, solicits, requests, or assists in the commission of a felony enumerated in paragraph (17) of subdivision (a), which results in the death of some person or persons, and who is found guilty of murder in the first degree therefor, shall

be punished by death or imprisonment in the state prison for life without the possibility of parole"; and

WHEREAS, The summary of Proposition 115 prepared by the Legislative Analyst states that "the proposal makes numerous significant and complex changes in criminal law and in the judicial procedures that must be followed in criminal cases"; and

WHEREAS, California's Proposition 115 required ordinary citizens who lacked the necessary legal expertise and knowledge of judicial procedures to make "significant and complex changes" to California's Constitution regarding criminal law and judicial procedures; and

WHEREAS, In California, a conviction for felony-murder with special circumstances requires a sentence of death or life in prison without the possibility of parole; and

WHEREAS, It is a bedrock principle of the law and of equity that a person should be punished for their actions according to their own level of individual culpability; and

WHEREAS, It can be cruel and unusual punishment to not assess individual liability for nonperpetrators of the fatal act and impute culpability for another's bad act, thereby imposing irredeemable sentences that are disproportionate to the conduct in the underlying case; and

WHEREAS, In California, a defendant in a felony-murder with a special circumstance case is not punished on their level of intention or culpability, but are sentenced as if they had the intent to kill, even if the victim of the underlying felony actually commits the fatal act; and

WHEREAS, In 2015, based on the decisions of the United States Supreme Court in Enmund v. Florida (1982) 458 U.S. 782 and Tison v. Arizona (1987) 481 U.S. 137, the California Supreme Court decided People v. Banks (2015) 61 Cal.4th 788 (BANKS), which established a five-factor test used to assess the sufficiency of the evidence to support a special circumstance finding. The California Supreme Court clarified its decision in Banks one year later in People v. Clark (2016) 63 Cal.4th 522 (CLARK), which set forth factors to be used in determining whether a defendant has acted with "reckless indifference to human life"; and

WHEREAS, While Banks and Clark are recognized by the courts in a habeas corpus petition for those already convicted, the determination of what constitutes "major participation" or "reckless indifference to human life" in a particular case remains subject to judicial interpretation or bias towards the finality of judgment; and

WHEREAS, The California Supreme Court in the Banks decision stated that imposing these two additional statutory requirements, major participation and reckless indifference to human life, to mandate either life without the possibility of parole or a death sentence, conforms with the United States Supreme Court Eighth Amendment jurisprudence denouncing cruel and unusual punishment; and

WHEREAS, The decision of whether to allege a special circumstance is at the sole discretion of the district attorney, which results in inconsistent, unequal, and potentially biased application of this lethal law; and

WHEREAS, Ninety percent of the 200 women and transgender people in California women's prisons serving life without the possibility of parole were sentenced as aiders and abettors with special circumstances, including under the felony-murder rule with special circumstances, the majority of whom were survivors of abuse, such as intimate partner violence, child abuse, sexual violence, and human trafficking; and

WHEREAS, According to the Department of Corrections and Rehabilitation (CDCR) Strategic Offender Management System, as of July 31, 2018, there were 5,206 people serving a sentence of life without the possibility of parole, 3,711 of which were first-time offenders and 3,221 of which were 25 years of age or younger at the time the crime was committed; and

WHEREAS, The most common age of a defendant at the time of the crime for which they have received a sentence of life without parole is 19 years of age; and

WHEREAS, The largest population of those sentenced under the felony-murder rule with special circumstances and serving a sentence of life without the possibility of parole are youth who were between 18 and 25 years of age at the time of the crime; and

WHEREAS, Neurological research has concluded that the human brain is not fully formed until 25 years of age and that young people do not have adult levels of judgment, impulse control, or the ability to foresee the consequences of their actions; and

WHEREAS, Condemning a young person to a life behind bars with no possibility of release entirely disregards the human capacity for rehabilitation, the enhanced ability of young people to grow and change, and the very real physical and psychological differences between younger people and mature adults; and

WHEREAS, People of color are disproportionately sentenced to life without the possibility of parole, as evidenced by the fact that 68 percent of people who receive that sentence are Black and Latinx; and

WHEREAS, According to the CDCR Monthly Report of Population, as of September 30, 2019, California continues to house inmates in numbers beyond its maximum capacity at an average of 130 percent of capacity. In some institutions, such as California State Prison, Solano, the inmate population is at 173.9 percent of capacity, housing almost 2000 people over the designed maximum capacity. Overpopulation remains the main contributing factor to inhumane and poor living conditions in state prisons; and

WHEREAS, According to the Legislative Analyst's Office, incarceration of an inmate by CDCR is costing taxpayers $84,848 annually as of the 2019–20 fiscal year; and

WHEREAS, CDCR has historically made rehabilitation programs and educational programs unavailable or inaccessible to incarcerated individuals sentenced to the death penalty or life without the possibility of parole; and

WHEREAS, The California Supreme Court in People v. Dillon (1983) 34 Cal.3d 441 states "... the state must exercise its power to prescribe penalties within the limits of civilized standards and must treat its members with respect for their intrinsic worth as human beings: 'Punishment which is so excessive as to transgress those limits and deny that worth cannot be tolerated.' We concluded that a punishment may violate the California constitutional prohibition 'if, although not cruel or unusual in its method, it is so disproportionate to the crime for which it is inflicted that it shocks the conscience and offends fundamental notions of human dignity"; now, therefore, be it

Resolved by the Senate of the State of California, the Assembly thereof concurring, That the Legislature recognizes the need for statutory changes to more equitably sentence offenders in accordance with their involvement in the crime and the need to rectify the fundamental contradiction between the concept of rehabilitation

and the irredeemable sentence of life in prison without the possibility of parole; and be it further

Resolved, That the Secretary of the Senate transmit copies of this resolution to the author for appropriate distribution.

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Senate Concurrent Resolution No. ____
Relative to criminal sentencing.

DOI: 10.1111/1745-9133.12496

CRIMINOLOGY
& Public Policy

ORIGINAL ARTICLE

CRIME CONTROL AND RECIDIVISM

Is life without parole an effective way to reduce violent crime? An empirical assessment

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Research Summary: By taking advantage of data published by the Sentencing Project to analyze whether states that use life without parole (LWOP) more often experience lower violent crime rates or greater reductions in violent crime, this study is the first to empirically assess the crime-reducing potential of LWOP sentences. The results suggest that LWOP might produce a small absolute reduction in violent crime but that it is no more effective than life with parole.

Policy Implications: Despite reductions in the use of the death penalty, LWOP has expanded dramatically—and at a much faster rate—over the last quarter century. This expansion has come at great financial and human costs and has not been distributed equally throughout the population. As such, the public policy debate over the use of LWOP is likely to intensify. Yet, to date, there have been no empirical assessments of LWOP's efficacy to inform this debate. This study begins to fill this gap in our knowledge, and the results, if replicated, suggest that the use of LWOP should be either scaled back or eliminated.

KEYWORDS

deterrence, incapacitation, life without parole, sentencing policy, violent crime

Over the last several decades, life-without-parole (LWOP) sentences have proliferated in the United States. In 1970, only seven states even authorized LWOP (Nellis, 2013), but by 2016, only Alaska did not have an explicit LWOP statute (Nellis, 2017). Even more recently, while the use of the formal death penalty has been in decline for the past two decades (Death Penalty Information Center, 2018), the size of the LWOP population has exploded at a rate that far surpasses the decline in death sentences so that many who were never at risk of an execution are now being sentenced to die in prison (Henry, 2012). Since 1992, the number of inmates serving LWOP has more than quadrupled (Nellis, 2013, 2017)

while the overall prison population has only increased by 71% (Carson & Mulako-Wangota, n.d.). In 2016, nearly 1 in every 28 American prisoners was serving LWOP, compared with just 1 in every 71 prisoners in 1992 (Carson & Mulako-Wangota, n.d.; Nellis, 2013, 2017). More people are now serving LWOP in the United States than there are people serving life sentences of any kind in Europe, which has more than double the population, and it has been estimated that the U.S. imprisons more than *half* of the worldwide LWOP population (van Zyl Smit & Appleton, 2019). There are, obviously, numerous reasons for this rapid expansion in the use of LWOP, including as an alternative to the death penalty (Barkow, 2012; Seeds, 2018), but one of the formal, explicitly stated goals of this sanction in at least some states was to fight crime (Broun & Allison, 2016; Gottschalk, 2014; Robinson, 2012; Spohn, 2014; Tonry, 2016; van Zyl Smit & Appleton, 2019; Yates, 2015). Nonetheless, as the use of LWOP has grown, several criticisms of LWOP have started to emerge. These sentences are extraordinarily expensive, especially considering the fact that the costs of incarceration increase dramatically as inmates age (American Civil Liberties Union, 2012; Human Rights Watch, 2012). They also have a racially disproportionate impact as the majority of those sentenced to LWOP are people of color (American Civil Liberties Union, 2014; Capers, 2012; Nellis, 2013, 2017), and because of the amount of suffering they cause and their threat to human dignity, LWOP sentences have been denounced by many as a violation of human rights (Capers, 2012; Henry, 2012; Leigey, 2015; van Zyl Smit & Appleton, 2019; Villaume, 2005).

Given this state of affairs, it would be prudent to ask whether LWOP is even effective at reducing violent crime. In fact, more than three decades ago, prior to the explosion in the use of LWOP, Cheatwood (1988) called for research into LWOP's efficacy. Yet, this question has never been examined empirically, and the evidence that does exist is equivocal on this point. On the one hand, violent crime rates have plunged since the early 1990s (Federal Bureau of Investigation, 2017), so it is entirely plausible that the growth of LWOP has contributed to this decline. On the other hand, existing criminological theory and research both provide contradictory expectations as to whether LWOP is likely to reduce violent crime. Whereas both incapacitation and deterrence theories suggest that increasingly severe sentences (like LWOP) will reduce criminal offending, both theories also point out that as sentences get overly harsh, there are likely to be diminishing returns and that at some point, the crime-reducing power of a punishment will max out. Empirically, there is a robust and consistent finding that the certainty of punishment matters more than its severity and that increasing already harsh punishments does not reduce crime (Travis, Western, & Redburn, 2014), but there is considerable debate in the academic literature over the deterrent effect of the death penalty (Nagin & Pepper, 2012). In many ways, LWOP is more similar to a death sentence than it is to a lengthy term of years (Berry, 2010; Henry, 2012; Kleinstuber, Joy, & Mansley, 2016; Leigey, 2015; Villaume, 2005), so it is not clear whether the findings of the wider literature on deterrence or the findings of the death penalty literature are more applicable to LWOP. Therefore, it is crucial to study the specific impact of LWOP to understand what role, if any, it plays in lowering violent crime rates. This study attempts to do just this by taking advantage of data collected and published by The Sentencing Project on LWOP sentences to examine whether states that use LWOP more prolifically experience lower violent crime rates or greater reductions in violent crime when compared with states that use LWOP less often.

1 | INCARCERATION AND CRIME: THEORETICAL AND EMPIRICAL OVERVIEW

The idea that harsher punishment may reduce crime is premised on two different theories: deterrence and incapacitation. Simply put, deterrence theory argues that the threat of punishment will convince

potential lawbreakers to obey the law in order to avoid the displeasure associated with the punishment (Beccaria, 1767/1963; Becker, 1968). The concept of incapacitation, meanwhile, makes no claim that punishment will alter the decision-making of potential offenders. Rather, by locking offenders in prisons, it sees punishment as making it physically impossible (or at least extremely difficult) for them to re-offend (Canelo-Cacho, 2002; Levitt, 2004).[1] According to both approaches, therefore, LWOP sentences should be highly effective at reducing crime. LWOP is one of the most severe sanctions that can be imposed, which means that it should invoke the most fear in potential offenders, and by making offenders ineligible for release, it should make their incapacitation permanent.

A few caveats in these approaches, however, cast doubt on the assertion that LWOP should reduce crime. First, deterrence theory suggests that the certainty of punishment is more important than its severity (Beccaria, 1767; 1963), which means that using LWOP without increasing the risk of apprehension is unlikely to have much of an effect on crime. Furthermore, the concept of marginal deterrence suggests that each additional increment of a punishment's severity will have less effect than the previous increment because the additional deterrent value added by making a sentence more severe is necessarily limited by the deterrent value of less severe sanctions (Stigler, 1970). In other words, increasing the severity of punishment will only be able to deter those who have not already been deterred by less serious penalties; thus, as punishment severity increases, there will likely be diminishing returns as there are fewer and fewer people left to deter (Donohue, 2009; Roeder, Eisen, & Bowling, 2015; Travis et al., 2014). Perhaps even more problematically, by increasing the severity of a punishment, the sanctions for less serious crimes become so similar to those of more serious crimes that a rationally calculating potential offender may see no reason not to commit the more serious offense (Beccaria, 1767; 1963; Shavell, 1992). Given this proposition, it is difficult to imagine that LWOP could be any more effective than life with parole or even a lengthy term of years at deterring potential offenders.

Similarly, because criminal activity tends to diminish quickly after one's mid-20s (Hirschi & Gottfredson, 1983; Siegel, 2015), there are also likely to be diminishing returns on incapacitation as punishment gets more severe. Once offenders have been incarcerated beyond the ages in which they are likely to be criminally active, further imprisonment is no longer accomplishing any incapacitation. Thus, it would again seem unlikely that LWOP could be superior to life with parole or to a decades-long prison term at incapacitation. Furthermore, because society tends to incarcerate the most severe offenders first, expanding LWOP to include less and less serious offenders is also likely to have diminishing returns. As Levitt (2004, p. 179) explained, "the two-millionth criminal imprisoned is likely to impose a much smaller crime burden on society than the first prisoner." Therefore, even if LWOP does achieve some incapacitating effect on the most severe offenders who may have continued to offend until their deaths, the expansion of LWOP to other offenders is not likely to achieve any additional crime reduction.

The existing empirical research supports the idea that punishment can reduce crime but that the certainty of punishment matters more than its severity and that the efficacy of punishment dissipates rapidly. As Nagin (2013, p. 201) has summarized, "the perceived certainty of punishment is associated with reduced self-reported or intended offending." For example, increasing police resources to increase the odds of apprehension has been shown to lower crime rates (Evans & Owens, 2007; Levitt, 1997, 2004; Marvell & Moody, 1994) and imposing short jail sentences has been shown to be a more effective deterrent than probation or fines (Hawken, 2010; Hawken & Kleiman, 2009; Kleiman, 2010; Weisburd, Einat, & Kowalski, 2008). Yet, "there is little evidence that increases in the length of already long prison sentences" produce any additional deterrent value (Nagin, 2013, p. 201)—a conclusion that has been reached by "[n]early every leading survey of the deterrence literature" (Travis et al., 2014, p. 90). These findings would suggest that LWOP is unlikely to impose any additional deterrent value that other harsh, but slightly less severe, punishments have not already achieved.

When it comes to incapacitation, one study found that after being released from prison, more than half of offenders returned to the criminal trajectory on which they had been prior to being incarcerated (Bhati & Piquero, 2008), which suggests that incarceration serves an important incapacitating role.The data also consistently indicate, however, that inmates serving life terms are comparatively well behaved (Cunningham & Sorensen, 2006; Sorensen & Reidy, 2018, 2019) and that upon release, older offenders and paroled lifers are extremely unlikely to re-offend (Advisory Committee on Geriatric and Seriously Ill Inmates, 2005; Anderson, 2019; California Department of Corrections and Rehabilitation, 2013; Justice Policy Institute, 2018; Mauer, King, & Young, 2004; Millemann, Bowman-Rivas, & Smith, 2017; Rosenfeld, Wallman, & Fornango, 2005; State of New York Department of Corrections and Community Supervision, 2016; van Zyl Smit & Appleton, 2019; Weisberg, Mukamal, & Segall, 2011, pp. 282–285). Furthermore, Roeder et al. (2015) discovered that although increasing incarceration rates were responsible for around 6% of the decline in property crime rates during the 1990s, they have had no impact since then, and they played almost no role in the decline in violent crime since 1990. All of this indicates that even though prison sentences will obviously prevent incarcerated offenders from being able to re-offend against members of the general public, LWOP is unlikely to be more effective than life with parole or even lengthy periods of incarceration at incapacitating offenders, and that as LWOP expands its reach to less and less serious offenders, its incapacitating effects will decline precipitously.

Although there is no direct test of LWOP's efficacy, there have been numerous analyses of the impact of three strikes laws. Three strikes policies, which mandate a minimum sentence for third-time felons—sometimes even life in prison—developed at the same time as LWOP expanded, were fueled by the same "tough-on-crime" mentality, and in many cases were a *cause* of LWOP's expansion (Ogletree & Sarat, 2012; Spohn, 2014; Tonry, 2014, 2016). Yet, the results of these studies have been equivocal. Some tests concluded that three strikes policies reduced crime (Chen, 2008; Helland & Tabarrok, 2007; Shepherd, 2002), whereas others found that they did not (Males & Macallair, 1999; Worrall, 2004; Zimring, Hawkins, & Kamin, 2001) and still others found that they *increased* homicide rates (Kovandzic et al., 2002; Marvell & Moody, 2001). Yet another study found that three strikes laws reduced nonviolent offending but increased violent crime (Iyengar, 2008), and a recent analysis of California's three strikes law concluded that its impact on crime was modest and that the second strike produced a greater marginal deterrent effect than the third strike (Datta, 2017). These findings would seem to indicate that although incarceration can reduce crime, the magnitude of this effect is small and that the effect of increasing sentencing severity maxes out quickly, which would suggest that LWOP is probably no more effective than life with parole or even a lengthy term of years.

2 | LIFE WITHOUT PAROLE: DEATH BY ANOTHER NAME?

Unfortunately, none of the studies looking at incarceration's impact on crime have looked at the impact of LWOP sentences, which several commentators and scholars have argued are really just "semantically disguised sentences of death" (Villaume, 2005, p. 266; see also Berry, 2010; Henry, 2012; Kleinstuber et al., 2016; Leigey, 2015). In the words of one death row inmate in Delaware, "the difference between LWOP and death is like the 'difference between drowning and suffocation,'" and another death row inmate compared the difference between LWOP and death to "'living on the East and West sides of Hell'" (Kleinstuber et al., 2016, p. 188). Echoing these sentiments, an inmate serving LWOP indicated in an interview that inmates refer to LWOP as "the hard death penalty" (Leigey, 2015, p. 15). When viewed in this light, the dearth of any empirical assessment of LWOP's influence on crime is alarming. In essence, if LWOP is conceptualized as a type of death sentence, then the dramatic reduction in

death sentences and executions that the United States has experienced since the mid-1990s (Death Penalty Information Center, 2018) is a mirage as there are now *more* people being sentenced to die in prison—all without the benefit of the super-due process protections to which death row inhabitants are entitled (Berry, 2010; Henry, 2012). Furthermore, if LWOP is a type of death sentence, then the literature on incarceration and crime reviewed earlier may not be applicable to it, and the literature on capital punishment is mixed as to what effect, if any, the death penalty has on crime rates (Nagin & Pepper, 2012). Some studies have found a robust deterrent effect, whereas others have found either no deterrent effect or a brutalization effect (Nagin & Pepper, 2012; Shepherd, 2005).

One of the primary reasons for these contradictory findings is that these studies are plagued with methodological problems that drastically influence the outcome of their statistical models (Berk, 2005; Donohue & Wolfers, 2005, 2009; Nagin & Pepper, 2012). LWOP, however, overcomes many of these methodological pitfalls, making it less susceptible to the statistical volatitlity and uncertainty of death penalty studies, which makes it a potentially fruitful avenue for empirical investigation. One of the major issues death penalty studies must confront is that it is impossible to know how many death sentences will eventually lead to an execution, so there is no way to create a universally agreed upon method of calculating the risk of execution (Nagin & Pepper, 2012). LWOP, on the other hand, begins to be carried out the moment the sentence is imposed, and because LWOP sentences are not subject to any additional judicial scrutiny (like automatic review, state-funded appellate counsel, or super-due process) the way that death sentenes are, LWOP sentences are rarely overturned or commuted (Barkow, 2012; Henry, 2012), which means there is no need to deteremine which LWOP sentences will eventually be imposed. In fact, although most death sentences imposed since 1973 have *not* resulted in an execution (Baumgartner & Dietrich, 2015), the reversal rate for noncapital cases is estimated to be around 10% to 20% (Henry, 2012).

Second, executions and formal death sentences are statistically rare events that are not imposed in a time-stable manner, which means that even slight variations in measurement practices or model specifications can yield dramatically different results and outlier cases can have an undue influence on the outcome of statistical models (Berk, 2005; Cohen-Cole, Durlauf, Fagan, & Nagin, 2009; Donohue & Wolfers, 2005; Land, Teske, & Zheng, 2009; Nagin & Pepper, 2012; Shepherd, 2005). It also means that, because executions happen so infrequently, any deterrent effect that they have, no matter how large, might simply be too small detect (Katz, Levitt, & Shustorovich, 2003). When considering the fact that homicide rates are also highly unstable, these realities suggest that it will be challenging to distinguish between signal and noise in statistical models, which again means that the results will be highly susceptible to model specification (Katz et al., 2003). LWOP sentences, however, are not statistically rare, and because they last so long, their number is stable over time, which should also make statistical models less volatile and more reliable.

A third major problem for death penalty studies is that death sentences and executions are discrete events that occur at a single moment in history, but it is not clear how long their deterrent effects can be expected to last (Zimmerman, 2004), and the time period one chooses to investigate can have an enormous impact on the outcome of a study (Donohue & Wolfers, 2005; Land et al., 2009). In contrast, LWOP is a continuous event that lasts indefinitely, which means that its deterrent or incapacitating power—if it exists—should also be continuous, thus, eliminating this problem.

Lastly, as a practical matter, the implementation of the death penalty is neither swift nor certain—even among those who have already been sentenced to death—a fact that might wipe out or mask any deterrent value that executions might otherwise have had (Nagin & Pepper, 2012; Shepherd, 2004). Once again, LWOP overcomes this concern because it is a mandatory penalty for many crimes, it is imposed immediately upon being sentenced, it continues to be imposed even during any subsequent appeals, and it is rarely overturned or commuted (Barkow, 2012; Henry, 2012). Therefore, even though

the objective and perceived risk of being sentenced to LWOP is difficult to determine with precision, LWOP sentences are clearly far more certain than death sentences, which means that LWOP's deterrent power is less likely to be masked by a lack of certainty.

Given these concerns, the ability of LWOP to overcome them, and the proliferation of LWOP over the past quarter-century, it is imperative that the specific impact of LWOP be studied. Simply put, LWOP occupies a unique location somewhere between a harsh prison sentence and a formal death sentence, so it is impossible to generalize existing research findings to LWOP, which means that LWOP must be studied as a separate phenomenon. Even if LWOP is conceptualized as a type of death sentence, its distinctive features provide it some clear advantages relative to formal death sentences and executions for analyzing the punishment's effect on violent crime rates. If, on the other hand, LWOP is not considered a type of death sentence, then it is not clear how much more severe it is than a term of years, so its crime-fighting potential is still unknown. Thus, it is critical to subject LWOP's effectiveness as a crime-fighting tool to empirical analysis, which has yet to be done and is precisely what this study attempts to do.

3 | METHOD

3.1 | Primary independent variables

Conceptualizing exactly what is meant by a sentence of LWOP is challenging because there are ways of accomplishing *de facto* LWOP sentences without explicitly sentencing someone to LWOP. For example, Alaska does not authorize LWOP sentences, but it does permit sentences of 99 years. The question of precisely how long a fixed-term sentence must be before it should be considered a "virtual" or *de facto* LWOP sentence, however, is an open question with no easy answer (Barkow, 2012; van Zyl Smit & Appleton, 2019).[2] Furthermore, even if we were to arbitrarily assign a length for virtual life sentences, the only year for which there are nationwide, state-level data on the number of prisoners serving lengthy or virtual life sentences is 2016 (Nellis, 2017; van Zyl Smit & Appleton, 2019). Therefore, to ensure that we have a reliable and consistent measure of LWOP over time, we have restricted our analysis to explicit LWOP sentences.

Data on the number of inmates serving formal LWOP sentences in each state are only available in the years 1992, 1993, 2003, 2008, 2012, and 2016. Because of the close proximity of the years 1992 and 1993, we decided to omit the year 1993 from our analysis. The number of individuals serving LWOP for 1992 comes from the Bureau of Justice Statistics' (BJS) *Sourcebook of Criminal Justice Statistics*. For all other years, we rely on data published by The Sentencing Project. To explore the full range of LWOP's possible deterrent and incapacitating effects, we use four different measures of LWOP. The total number of people serving LWOP sentences in thousands ("Total LWOP")[3] and the number of people serving LWOP per 10,000 population ("LWOP per capita") are both expected to capture the absolute deterrent or incapacitating effect of LWOP. We include both measures because there is disagreement over whether the sheer volume of punishment or the rate of punishment is the thing to which potential criminals respond (Kovandzic, Vieraitis, & Boots, 2009). On the one hand, as the number of people serving LWOP increases, the public is likely to hear about the sentence more often (even if the actual rate at which the sentence is imposed remains low). By way of comparison, most people consider Texas to be the capital of capital punishment because it issues the largest number of death sentences and performs the most executions. From 1977 to 1999, however, Texas ranked *sixteenth* in death sentences per known murderer, while Nevada had the highest death sentence-to-known murderer ratio (Blume, Eisenberg, & Wells, 2004). Even looking at executions, from 1976 to

2015, Texas was second to Oklahoma in executions per capita, and from 1977 to 2010, it was second to Virginia in executions per death sentence (Death Penalty Information Center, n.d.). Nevertheless, as a result of the publicity of Texas's death penalty, one might reasonably conclude that it would be the riskiest state in which to kill. The same logic might also carry over to LWOP sentences; thus, it could be the sheer volume of LWOP sentences rather than the LWOP rate that deters. On the other hand, as the rate of people serving LWOP goes up, both the likelihood of knowing someone who was sentenced to LWOP and the objective risk of receiving a LWOP sentence increase. Therefore, we examine the effect of LWOP both ways.

In addition to absolute effects, we are interested in the possibility of marginal deterrent or incapacitating effects—that is, does LWOP have any additional crime-reducing power beyond that which is achieved by life with parole or by incarceration more generally? Therefore, we also measure the proportion of all life-sentenced inmates who are ineligible for parole ("LWOP per life sentence") and the percentage of all prison inmates who are serving LWOP ("%LWOP prisoners") to capture the effect of LWOP beyond life with parole and imprisonment, respectively.[4] It is important to recognize the difference in scaling for these two LWOP measures. "LWOP per life sentence" has a theoretical range of 0 to 1, whereas "%LWOP prisoners" has a theoretical range of 0 to 100.

These two measures have two additional benefits compared with our first two measures of LWOP. First, because one must first be convicted of a crime—specifically a life-eligible offense—to be sentenced to LWOP, these two variables are better measures of the objective risk of receiving a LWOP sentence compared with "LWOP per capita." These variables also, to some extent, help to control for the possibility that the LWOP population increased *because* violent crime increased. If increasing violent crime rates are driving the size of the LWOP population, they should also be driving a comparable increase in overall prison populations and the overall population of lifers. Thus, increasing violent crime rates should not explain an increase in the proportion of inmates or lifers serving LWOP. Both of these ratios are the result of purely *political* decisions to deny a greater proportion of felons an opportunity to ever be released, and so, these two measures allow us to examine whether these political choices are an effective way to lower violent crime rates.

3.2 | Dependent variables

We measured the impact of LWOP on violent crime through two dependent variables. The first dependent variable, "Violent crime," is the violent crime rate, excluding rape, measured at the state level as reported by the FBI's *Uniform Crime Report* (UCR). Our measure therefore includes the number of reported murders, robberies, and aggravated assaults. Our rationale for using this variable is described in the Appendix. Furthermore, to ensure time order, we measure the violent crime rate in the calendar year *after* our LWOP measures.

Although the use of the "Violent crime" variable will indicate whether states that use LWOP more often have lower violent crime rates compared with states that use it less often, there is also a potential problem with this variable. Crime rates tend to be highly correlated from year to year. Therefore, a state may have a high LWOP population or its policy makers may choose to send a greater proportion of offenders to LWOP *because* the state had a high rate of violent crime. Although we attempt to control for this concern through the use of the two proportional independent variables, these are really an imperfect means of addressing this problem. Therefore, to address the risk of reverse causation, we also measured the impact of LWOP on violent crime using "Δ Violent crime," which is the change in "Violent crime" from the year in which the LWOP variables are measured to the following calendar year (e.g., the change in "Violent crime" from 2016 to 2017). This variable will assess whether states

that use LWOP more often experience larger decreases in violent crime regardless of what their starting violent crime rate was.

3.3 | Control variables

We have included several control variables, each of which, as we describe in the Appendix, has been theorized to, or empirically shown to, affect violent crime rates and has also previously been used to analyze the death penalty's deterrent effects. We have organized them into three major categories, all of which are measured at the state level: (1) demographic variables, (2) economic variables, and (3) criminal justice variables. The demographic variables are the percentage of the noninstitutionalized population age 25 and older, which possesses a bachelor's degree or higher ("College"), the percentage of the population aged 18–24 ("18–24"), the percentage of the population aged 25–34 ("25–34"), and the percentage of the population that does not identify as White alone ("Non-White"). Each of these measures comes from the U.S. Census Bureau. The economic variables are the percentage of the noninstitutionalized civilian population that is 16 years old or older, which is employed in a civilian job ("Employed") and the percentage of families in each state living below the poverty line ("Poverty"). These economic data come from the Bureau of Labor Statistics (BLS). The criminal justice variables come from various governmental sources. The number of sworn police officers per 1,000 persons in the population ("Police") comes from the FBI's online *Crime Data Explorer*. The percentage of all suicides carried out using a firearm ("Firearm suicide") is based on data from the Center for Disease Control and Prevention's (CDC) *National Center for Health Statistics Compressed Mortality File*. This variable is included because there is no reliable estimate of the percentage of households with a firearm at the state level after 2004, but the firearm suicide-to-suicide ratio has been shown to be a reliable proxy for the percentage of households with a firearm (Azrael, Cook, & Miller, 2004; National Research Council, 2005) and has been used extensively in the academic literature examining the relationship between firearm ownership and violent crime (Moore & Bergner, 2016; RAND, 2018). The two policy variables, presence of a three strikes law ("Three strikes law") and presence of a shall issue or right-to-carry (RTC) gun law ("Right to carry law"), are both dummy variables that indicate whether the state passed a recognizable version of the respective law. Both variables are coded such that the presence of the law equals 1 and the absence of the law equals 0. These data come from the National Criminal Justice Reference Service (NCJRS) and the authors' review of the Nexis legal database. State legislative websites were used to cross-check these sources. Finally, the exposure variable "Total population" comes from the FBI's *Uniform Crime Report*.

All control variables are measured in the same year as the LWOP variables with the exception of "College," which is measured in the year prior to the LWOP variables because no measure of the percentage of each state's population that had attained a college degree or higher could be found for 1992. Data are available, however, for each year prior to each of the five time periods. Therefore, "College" is measured at t1 *minus* 1 relative to the measures of LWOP for each time period included in the analysis. Further details on how we selected our control variables are provided in the Appendix, and the summary statistics for all variables used in the analysis are presented in Table A2 in the Appendix.

3.4 | Analytic strategy

Because the data are panel data (otherwise known as "pooled time-series data"), we use a fixed-effects model to account for both time-invariant, state-level effects and time dependent, national-level trends (Allison, 2009; Rabe-Hesketh & Skrondal, 2012). Furthermore, because violent crime rates are distributed as counts, we first determine whether the Poisson or negative binomial distribution better

captures the shape of the data (Long, 1997; Long & Freese, 2006; Osgood, 2000). Chi-square analyses of the log-likelihood statistics indicate that there is overdispersion in the dependent variable, and thus, the negative binomial model better accounts for the data structure (Allison, 2009; Long & Freese, 2006). For technical details on how we performed the negative binomial analysis, refer to the Appendix.

As a result of the potential for reverse causation between our measures of LWOP and violent crime rates, we additionally analyze the change in violent crime rates, "Δ Violent crime." Unlike violent crime rates, which are distributed as counts, the distribution of the change in the violent crime rate is nearly normal. Therefore, we analyze "Δ Violent crime" using ordinary least-squares (OLS) regression, with robust standard errors. We report both the unstandardized coefficients, b, and the standardized coefficients, β, so that unit-change effects and magnitude differences, respectively, can both be easily determined.

Finally, because it has been suggested that punishments are likely to have diminishing returns as they are expanded to less and less serious offenders (Levitt, 2004; Roeder et al., 2015), we re-ran all of our models with the square of the four LWOP measures included to account for the possibility that LWOP's effect may decline as it gets used more. In essence, as society tends to punish the most serious offenders first, each additional person sentenced to LWOP is less likely than the previous person to be a re-offending risk, which means that each additional person ensnared by the punishment is likely to have less effect on the violent crime rate than the previous person. Including the squared terms allows us to account for this possibility. To test for the joint significance of the linear and quadratic effects of the LWOP variables, Wald tests for joint significance were run. A significant result indicates that the variables are jointly significant in the model being examined. Finally, to better understand what a significant joint effect means, margin plots were constructed to help visualize the change in the dependent variables being predicted according to the joint effects. Because the LWOP variables and their squares are highly correlated, we mean centered all the continuous variables in these quadratic analyses, thus, reducing the correlation between the LWOP measure and its quadratic form. To keep all of our analyses consistent, we mean centered the continuous variables in the models without the quadratic terms as well. These mean-centered analyses are what we report in the Results section.

4 | RESULTS

4.1 | Linear effect of LWOP on violent crime

We begin by analyzing the linear effect of LWOP on "Violent crime." As discussed in the Method section, there are several plausible ways of calculating the size of the LWOP population, each of which suggests a different mechanism connecting the use of LWOP to reductions in violent crime: the raw number of prisoners serving LWOP or the proportion of all residents, all prisoners, or all lifers in a state who are serving LWOP. Therefore, we report the findings of models measuring LWOP using all four methods in Table 1. There is a bit of inconsistency in these results as the LWOP variable only achieves statistical significance in two models: Total LWOP population and LWOP as a percentage of all prisoners. Taken together these results suggest that using LWOP may produce a small reduction in violent crime but that it is no more effective than life with parole.

Recall that the "Total LWOP" variable is measured in *thousands*, so Model 1 in Table 1 indicates that for every *thousand* people serving LWOP, we would expect "Violent crime" to decline by 12%, which means that each person sentenced to LWOP should reduce "Violent crime" by 0.012%. To help put this result into perspective, in 2016 (the most recent data), only 14 states even had 1,000 prisoners serving LWOP, and the median LWOP population in 2016 was 337. So even by the most recent count,

TABLE 1 Negative binomial regression models predicting violent crime rate 1993 to 2017

Variable	Model 1		Model 2		Model 3		Model 4	
	Coefficient	IRR	Coefficient	IRR	Coefficient	IRR	Coefficient	IRR
Life Without Parole (LWOP)								
Absolute Deterrence								
Total LWOP (thousands)	−.128***	.880***						
	(.027)							
LWOP per capita			−.032	.969				
			(.039)					
Marginal Deterrence								
LWOP per life sentence					.271†	1.311†		
					(.163)			
%LWOP prisoners							−.032*	.969*
							(.014)	
Demographic Controls								
College	−.003	.997	−.002	.998	−.002	.998	−.001	.999
	(.013)		(.015)		(.014)		(.015)	
18–24	.055	1.057	.052	1.053	.071	1.073	.044	1.045
	(.045)		(.049)		(.047)		(.047)	
25–34	.014	1.014	.018	1.018	.026	1.026	.011	1.011
	(.023)		(.023)		(.022)		(.023)	
Non-White	−.013	.987	−.013	.987	−.014	.986	−.012	.988
	(.009)		(.009)		(.010)		(.009)	
Economic Controls								
Poverty	.007	1.007	.011	1.011	.009	1.009	.015	1.016
	(.014)		(.015)		(.016)		(.015)	
Employed	.022	1.022	.020	1.020	.021	1.022	.021	1.021
	(.013)		(.014)		(.014)		(.014)	
Criminal Justice Controls								
Police per capita	.150*	1.161*	.160*	1.173*	.164*	1.178*	.153*	1.166*
	(.073)		(.077)		(.078)		(.074)	
Firearm suicide	.009†	1.009†	.008	1.008	.006	1.006	.010†	1.010†
	(.005)		(.005)		(.005)		(.005)	
Three strikes law	−.067	.935	−.127†	.880†	−.147*	.863*	−.105	.901
	(.069)		(.069)		(.070)		(.074)	
Right to carry law	−.101	.904	−.069	.933	−.061	.940	−.063	.939
	(.076)		(.082)		(.080)		(.077)	
Constants								
y-intercept	−2.085***	.124***	−2.151***	.116***	−2.133***	.118***	−2.179***	.113***
	(.210)		(.233)		(.226)		(.225)	
ln Total population	1	1	1	1	1	1	1	1

(Continues)

TABLE 1 (Continued)

Variable	Model 1		Model 2		Model 3		Model 4	
	Coefficient	IRR	Coefficient	IRR	Coefficient	IRR	Coefficient	IRR
Observations								
State years	244		244		241		244	
α	.029***		.033***		.032***		.032***	
	(.003)		(.003)		(.003)		(.003)	
Log likelihood	−1345.896		−1357.269		−1339.027		−1355.141	

Notes. Negative binomial regression coefficient estimates and incidence-rate ratios (IRRs) are reported. Standard errors of the coefficients are in parentheses and are estimated using the outer product of the gradient vectors (OPG) option in Stata 15, as suggested by Allison (2009). We include 49 state dummy variables, not shown, to control for time-invariant, state-level characteristics and 4 year dummy variables, not shown, to control for national-level time trends. All independent variables are measured at t *minus* 1 relative to the dependent variable, except for College, which is measured at t *minus* 2 relative to the dependent variable. All continuous independent variables are mean centered.

$^{\dagger}p \leq .10$. $^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$ (two-tailed tests).

the median state would need to increase its LWOP population by 297% to achieve a 12% reduction in "Violent crime." In the entire data set, the state year with the median number of people serving LWOP has only 189 individuals serving LWOP, which means the median state year would need a 529% increase in its LWOP population to achieve the same 12% decline. Viewed in another way, as Table A2 in the Appendix shows, the median violent crime rate excluding rape in our study was 340.6 per 100,000 persons, so adding 1,000 people to the LWOP population in the state with the median "Violent crime" would reduce "Violent crime" by 40.9 violent crimes per 100,000 population. In Florida in 1992, the state year with the highest "Violent crime" in the following year (1,152.2 per 100,000), a 12% reduction in "Violent crime" would result in 138.3 fewer violent crimes (excluding rape) per 100,000 population.

Model 2 in Table 1 (LWOP per capita) fails to achieve statistical significance, whereas Model 3 (proportion of lifers serving LWOP), which is designed to measure the effect of LWOP beyond life with parole, is only marginally statistically significant and the magnitude of the effect is *positive*, meaning that if this effect is real, increasing the proportion of lifers who are ineligible for parole *increases* the violent crime rate (excluding rape). Lastly, Model 4 in Table 1 shows that increasing the percentage of prisoners serving LWOP has a small but statistically significant impact on violent offending. For every percentage point increase in the percentage of prisoners sentenced to LWOP, "Violent crime" is expected to decline by 3.1%. Again, to put this in perspective, the state year with the median percentage of inmates serving LWOP has 1.45% of its prisoners serving LWOP, which means that increasing the percentage of prisoners in the median state year serving LWOP by one percentage point to 2.45% would represent a 69.0% increase in the size of the LWOP population to achieve a 3.1% reduction in "Violent crime." Even with the growth of LWOP since 1992, the state with the median percentage of inmates serving LWOP in 2016 had only 2.49% of its inmates serving LWOP, so a one percentage point increase in this state would require increasing the LWOP population by 40.2%.

Although these models produce inconsistent results, it must be remembered that each one is measuring a slightly different phenomenon. Looking holistically at the results of these models suggests that LWOP may produce small reductions in violent offending but that this effect is being produced by the volume of LWOP rather than by its rate of use. Furthermore, the results suggest that LWOP might be slightly more effective than a term of years but that any deterrent or incapacitating power associated with LWOP can be better achieved using life-with-parole sentences. That is, even if increasing the number or percentage of inmates serving LWOP exerts some modest downward pressure on violent offending, the proportion of lifers serving LWOP has a marginally significant but *positive* impact

on "Violent crime," which means that any reduction in "Violent crime" attributable to increasing the number or percentage of inmates serving LWOP could also be achieved (and could potentially be better achieved) by simply increasing the number or percentage of prisoners who are sentenced to life with parole. That is, any crime reductions attributable to LWOP are being accomplished by the "life" part of the sentence, not by the "without parole" part.

4.2 | Linear effect of LWOP on changes in violent crime

As a result of the possibility that violent crime rates within a state may be serially correlated with prior years' violent crime rates and therefore run the risk of reverse causation (that is, perhaps violent crime rates are driving LWOP populations rather than the other way around), we decided to re-run the analysis using "Δ Violent crime," the change in the violent crime rate (excluding rape) between the year in which the LWOP population was measured and the following calendar year, as the dependent variable to determine whether LWOP has an impact on *changes* in the violent crime rate. Obviously, the change in violent crime from t_1 to t_2 cannot impact prison populations at t_1, so this variable eliminates the risk of reverse causation. As the results reported in Table 2 indicate, in all four models the LWOP variable fails to achieve statistical significance, which suggests that LWOP has no impact on changes in the violent crime rate (excluding rape).

4.3 | Quadratic effect of lwop on violent crime

Yet, it is possible that these results do not capture the full picture of what is going on and underestimate the impact of LWOP because, as discussed, it is possible that the crime-reducing power of a punishment diminishes as the punishment expands to ensnare less and less serious offenders. To account for this possibility, we re-ran all of our models with the addition of the square of our LWOP measures. The results of these models for estimating LWOP's effect on "Violent crime" are reported in Table 3, and the results of the Wald tests for joint significance are reported in Table 4. The results of the Wald tests indicate that, consistent with the models without the quadratic term, the Total LWOP population (in thousands) and the percentage of all prisoners serving LWOP are statistically significant but that the other two measures of LWOP are not. To illustrate how the two significant variables are related to "Violent crime" in these models, we have graphed the predicted quadratic effect of Total LWOP and percentage of LWOP prisoners in Figures 1 and 2, respectively.

As hypothesized, Figure 1 demonstrates that increasing the size of the LWOP population leads to diminishing returns. Using the results displayed in Model 9 of Table 3, we can see that at the mean, increasing the number of persons serving LWOP by *1,000* will produce a 10.6% reduction in "Violent crime" and that for every additional 1,000 people sentenced to LWOP, this impact declines by 0.2 percentage points. Thus, increasing the LWOP population from 1,000 to 2,000 individuals beyond the mean will reduce "Violent crime" by 10.4%. In our data set, the mean number of individuals serving LWOP is only 700, so increasing the LWOP population by 1,000 individuals in the mean state year would represent a 143% increase in the size of the LWOP population for that state year. As the confidence intervals displayed in Figure 1 demonstrate, a state would need to increase its LWOP population by nearly 2,000 individuals above the mean to have a statistically perceptible reduction in "Violent crime" relative to having the mean number of persons serving LWOP. As a result of diminishing returns, however, to achieve another statistically perceptible reduction, the state would then need to increase its LWOP population from 2,000 to nearly 6,000 above the mean, which is higher than the LWOP population of any state other than Florida in any year in our data set.

TABLE 2 OLS regression models predicting change in violent crime rates

Variable	Model 5		Model 6		Model 7		Model 8	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*
Life Without Parole (LWOP)								
Absolute Deterrence								
Total LWOP (thousands)	–4.073	–.187						
	(3.689)							
LWOP per capita			–7.002	–.378				
			(5.103)					
Marginal Deterrence								
LWOP per life sentence					–.976	–.010		
					(18.159)			
%LWOP prisoners							.131	.013
							(1.782)	
Demographic Controls								
College	2.360	.489	2.095	.434	2.334	.480	2.390	.495
	(1.562)		(1.619)		(1.549)		(1.565)	
18–24	2.118	.054	.711	.018	5.353	.131	2.339	.060
	(5.035)		(4.668)		(5.218)		(4.968)	
25–34	7.933*	.426*	7.778*	.417*	8.715**	.464**	7.977*	.428*
	(3.095)		(3.127)		(3.155)		(3.174)	
Non-White	–1.839	–.764	–1.855	–.771	–2.244	–.930	–1.879	–.781
	(1.654)		(1.651)		(1.672)		(1.657)	
Population (thousands)	.005*	1.215*	.004*	.915*	.004†	.925†	.004†	.919†
	(.002)		(.002)		(.002)		(.002)	
Economic Controls								
Poverty	1.632	.188	1.699	.196	1.799	.206	1.617	.187
	(2.345)		(2.293)		(2.345)		(2.354)	
Employed	1.834	.279	1.725	.262	1.830	.278	1.728	.263
	(2.157)		(2.123)		(2.112)		(2.177)	
Criminal Justice Controls								
Police per capita	7.335	.148	7.122	.144	7.224	.145	7.647	.154
	(10.472)		(10.160)		(10.329)		(10.510)	
Firearm suicide	.168	.073	.305	.133	–.170	–.074	.106	.046
	(.700)		(.652)		(.680)		(.698)	
Three strikes law	–13.249	–.227	–12.515	–.215	–14.305	–.244	–14.829	–.254
	(10.449)		(10.533)		(10.680)		(10.937)	
Right to carry law	–11.608	–.188	–10.664	–.172	–9.668	–.156	–10.952	–.177
	(8.042)		(8.177)		(8.224)		(8.349)	
Constant								
y-intercept	42.309		47.632		49.596		38.200	
	(33.056)		(33.720)		(33.669)		(33.130)	

(Continues)

TABLE 2 (Continued)

Variable	Model 5		Model 6		Model 7		Model 8	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*
Observations								
State years	244		244		241		244	
r^2	.363		.371		.376		.360	

Notes. All independent variables are measured at t_1, except for College, which is measured at t_1 *minus* 1. All continuous independent variables are mean centered. Standard errors are in parentheses and are estimated using robust standard errors. We include 49 state dummy variables, not shown, to control for time-invariant, state-level characteristics and 4 year dummy variables, not shown, to control for national-level time trends.

$^{\dagger}p \leq .10.$ $^{*}p \leq .05.$ $^{**}p \leq .01.$ $^{***}p \leq .001$ (two-tailed tests)

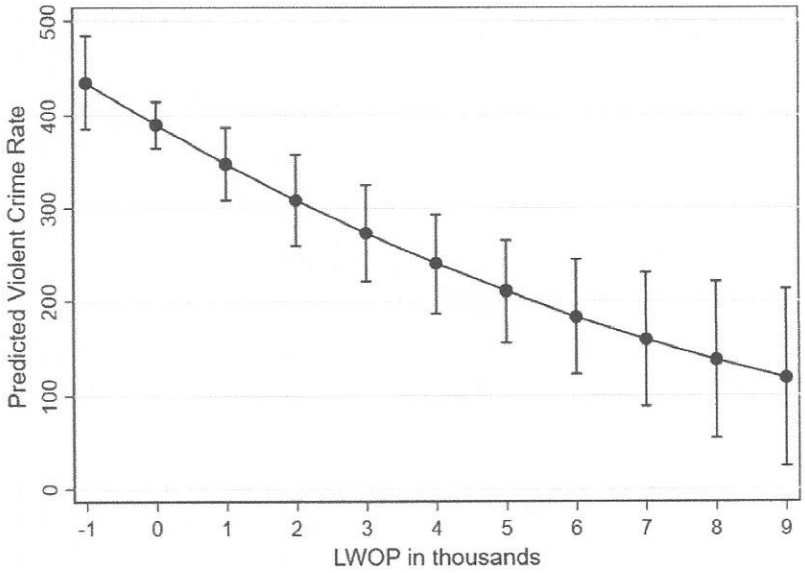

FIGURE 1 Predicted Violent Crime Rate based on Joint Effects of Total LWOP and Total LWOP^2

Notes: Predictive margins with 95 percent confidence intervals. Zero on the x-axis equals the mean, since the measure of LWOP is mean centered.

Model 12 in Table 3 indicates a perplexing result. As Figure 2 illustrates, it appears that increasing the percentage of prisoners serving LWOP initially *increases* the amount of violent crime but that this effect diminishes and eventually leads to a decline in "Violent crime" that gets *more* pronounced (rather than less) as the percentage of inmates serving LWOP increases.[5] That is, rather than having diminishing returns, this variable is predicted to have increasing returns. Using the results in Table 3, we see that at the mean, increasing the amount of prisoners serving LWOP by one percentage point is predicted to lead to a 1.0% decline in "Violent crime," but as the mean is past the point at which the slope turns negative, this effect is predicted to grow by 0.5 percentage points for each percentage point increase in the percentage of prisoners serving LWOP.

To fully understand what this result is indicating, these numbers need to be placed into the proper context. As Figure 2 illustrates and the vertex reported in Table 4 demonstrates, increasing the percentage of inmates serving LWOP *increases* violent offending until 1.08 percentage points below the mean. As shown in Table A2 in the Appendix, the median state year in our sample has only 1.45% of

TABLE 3 Negative binomial regression models predicting violent crime rate 1993 to 2017 with quadratic lwop measures

Variable	Model 9		Model 10		Model 11		Model 12	
	Coefficient	IRR	Coefficient	IRR	Coefficient	IRR	Coefficient	IRR
Life Without Parole (LWOP)								
Absolute Deterrence								
Total LWOP (thousands)	−.112*	.894*						
	(.050)							
Total LWOP (thousands)^2	−.002	.998						
	(.009)							
LWOP per capita			−.021	.979				
			(.053)					
LWOP per capita^2			−.002	.998				
			(.009)					
Marginal Deterrence								
LWOP per life sentence					.286	1.331		
					(.216)			
LWOP per life sentence^2					−.041	.960		
					(.313)			
%LWOP prisoners							−.010	.990
							(.021)	
%LWOP prisoners^2							−.005	.995
							(.004)	
Demographic Controls								
College	−.003	.997	−.003	.997	−.002	.998	−.001	.999
	(.013)		(.015)		(.015)		(.014)	
18–24	.057	1.059	.052	1.054	.071	1.074	.046	1.047
	(.045)		(.049)		(.047)		(.047)	
25–34	.015	1.015	.018	1.019	.026	1.026	.012	1.012
	(.022)		(.023)		(.022)		(.023)	
Non-White	−.013	.987	−.013	.987	−.014	.986	−.013	.987
	(.009)		(.009)		(.010)		(.009)	
Economic Controls								
Poverty	.007	1.007	.011	1.011	.009	1.009	.016	1.016
	(.014)		(.015)		(.016)		(.015)	
Employed	.022†	1.022†	.020	1.020	.021	1.022	.024†	1.024†
	(.013)		(.014)		(.014)		(.014)	
Criminal Justice Controls								
Police per capita	.150*	1.162*	.160*	1.174*	.164*	1.178*	.143†	1.154†
	(.073)		(.077)		(.079)		(.076)	
Firearm suicide	.009†	1.009†	.008	1.008	.006	1.006	.010†	1.010†
	(.005)		(.005)		(.005)		(.005)	

(Continues)

TABLE 3 (Continued)

Variable	Model 9 Coefficient	IRR	Model 10 Coefficient	IRR	Model 11 Coefficient	IRR	Model 12 Coefficient	IRR
Three strikes law	−.070	.932	−.128†	.880†	−.149*	.862*	−.099	.905
	(.069)		(.069)		(.076)		(.075)	
Right to carry law	−.102	.903	−.069	.934	−.062	.940	−.071	.931
	(.076)		(.082)		(.081)		(.080)	
Constants								
y-intercept	−2.088***	.124***	−2.156***	.116***	−2.130***	.119***	−2.165***	.115***
	(.209)		(.234)		(.226)		(.220)	
ln Total population	1	1	1	1	1	1	1	1
Observations								
State years	244		244		241		244	
α	.029***		.033***		.032***		.032***	
	(.003)		(.004)		(.003)		(.004)	
Log likelihood	−1345.837		−1357.202		−1339.014		−1353.346	

Notes. Negative binomial regression coefficient estimates and incidence-rate ratios (IRRs) are reported. Standard errors of the coefficients are in parentheses and are estimated using the outer product of the gradient vectors (OPG) option in Stata 15, as suggested by Allison (2009). We include 49 state dummy variables, not shown, to control for time-invariant, state-level characteristics and 4 year dummy variables, not shown, to control for national-level time trends. All independent variables are measured at t *minus* 1 relative to the dependent variable, except for College, which is measured at t *minus* 2 relative to the dependent variable. All continuous independent variables are mean centered

$^{\dagger}p \leq .10$. $^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$ (two-tailed tests)

TABLE 4 Postnegative binomial regression diagnostics for Joint Quadratic Effects

Joint Variable	Wald Test for Joint Significance d.f.	χ^2	*p*	Estimated Vertex Coefficient	SE	*p*
Total LWOP (thousands) and						
Total LWOP (thousands)^2	2	18.79	.0001	−25.165	107.457	.815
LWOP per capita and						
LWOP per capita^2	2	.53	.7657			
LWOP per life sentence and						
LWOP per life sentence^2	2	2.75	.2523			
%LWOP prisoners and						
%LWOP prisoners^2	2	6.01	.0496	−1.079	2.998	.719

its inmates serving LWOP, which is 1.09 percentage points below the mean of 2.54. Therefore, for the *majority* of state years in our data set, increasing the percentage of inmates serving LWOP would lead to an initial *increase* in "Violent crime." Furthermore, even for many of those states on the downside of the curve, these reductions in "Violent crime" would be canceled out by the predicted increases in "Violent crime" caused by earlier expansions of LWOP. Thus, the same reductions would be predicted to occur if their LWOP population was *lowered.*

Consistent with the models without quadratic effects, these results suggest that the size of the LWOP population rather than the LWOP per-capita rate is the phenomenon responsible for any reductions

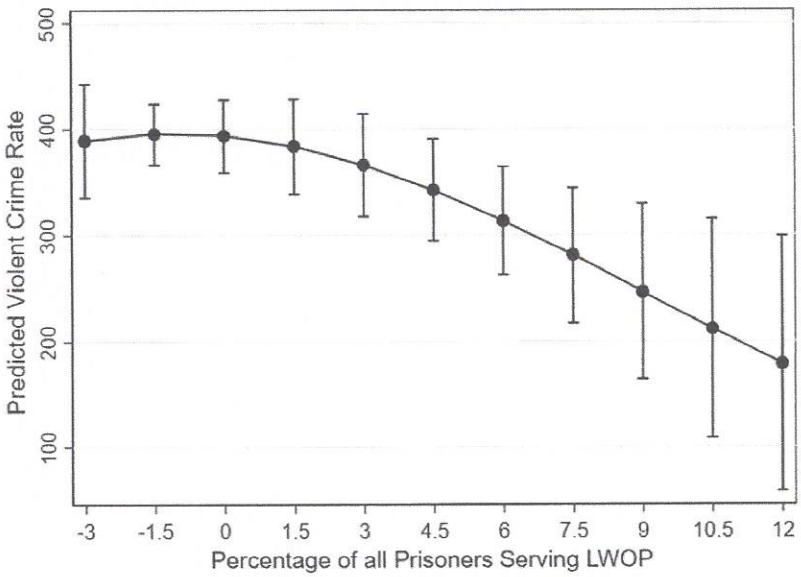

FIGURE 2 Predicted Violent Crime Rate based on Joint Effects of %LWOP prisoners and %LWOP prisoners^2
Notes: Predictive margins with 95 percent confidence intervals. Zero on the x-axis equals the mean, since the measure of LWOP is mean centered.

in crime attributable to LWOP and that increasing the proportion of prisoners serving LWOP may also produce some modest reductions in violent offending. Again, however, it is worth noting that the nonsignificance of the joint effect of the variables measuring the marginal impact of increasing the proportion of lifers serving LWOP seen in Table 4 suggests that even if LWOP does achieve some modest reductions in violent offending, it is no more effective than life with parole. Therefore, both the models with and without the quadratic term suggest that even though "life" might be lowering crime rates, "without parole" is not.

4.4 | Quadratic effect of lwop on changes in violent crime

Again, in an effort to address the risk of serial correlation and reverse causation, we re-ran these models using "Δ Violent crime" as the dependent variable. Table 5 reports the results of these analyses, and Table 6 reports the results of the Wald tests for joint significance. In this analysis, as in the analysis without the quadratic term, the variables measuring the number of persons serving LWOP and the variables measuring the proportion of all lifers serving LWOP are jointly nonsignificant. Unlike the earlier analysis, however, the variables measuring LWOP per capita and the percentage of prisoners serving LWOP are now both jointly significant. Again, to illustrate the predicted quadratic effects of the significant variables, we have graphed the relationship between LWOP per capita and the change in the violent crime rate (excluding rape) in Figure 3 and the relationship between the percentage of inmates serving LWOP and the change in the violent crime rate (excluding rape) in Figure 4. In both cases, the data produced the perplexing conclusion that increasing the LWOP variable produces *increasing*, rather than decreasing, returns.

Turning to the effect of LWOP per capita, it should be reiterated that this variable is measuring the number of persons serving LWOP *per 10,000* residents. Thus, the results reported in Model 14 in Table 5 indicate that for each additional person serving LWOP per 10,000 residents beyond the mean, the crime rate is expected to decline by 2.6 crimes per 100,000 (or 0.26 crimes per 10,000). As the mean

TABLE 5 OLS regression models predicting change in violent crime rates with quadratic LWOP measures

Variable	Model 13		Model 14		Model 15		Model 16	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*
Life Without Parole (LWOP)								
Absolute Deterrence								
Total LWOP (thousands)	.144	.007						
	(6.784)							
Total LWOP (thousands)^2	−.633	−.145						
	(.682)							
LWOP per capita			−2.574	−.139				
			(6.739)					
LWOP per capita^2			−.748	−.245				
			(.474)					
Marginal Deterrence								
LWOP per life sentence					25.946	.258		
					(27.916)			
LWOP per life sentence^2					−70.008†	−.300†		
					(40.150)			
%LWOP prisoners							3.374	.325
							(2.983)	
%LWOP prisoners^2							−.687*	−.356*
							(.320)	
Demographic Controls								
College	2.358	.489	1.953	.405	2.275	.468	2.449	.507
	(1.558)		(1.602)		(1.499)		(1.513)	
18–24	2.631	.067	.996	.025	6.048	.147	2.558	.065
	(5.081)		(4.680)		(5.108)		(4.991)	
25–34	8.119**	.436**	7.965*	.428*	8.769**	.467**	8.163*	.438*
	(3.126)		(3.111)		(3.106)		(3.192)	
Non-White	−1.854	−.771	−1.898	−.789	−2.358	−.977	−2.011	−.836
	(1.660)		(1.662)		(1.677)		(1.663)	
Population	.005*	1.238*	.004†	.848†	.004†	.883†	.004†	.896†
(thousands)	(.002)		(.002)		(.002)		(.002)	
Economic Controls								
Poverty	1.655	.191	1.511	.174	1.402	.160	1.675	.193
	(2.354)		(2.314)		(2.323)		(2.343)	
Employed	1.914	.291	1.872	.285	1.950	.296	2.092	.318
	(2.190)		(2.152)		(2.156)		(2.248)	
Criminal Justice Controls								
Police per capita	7.483	.151	7.460	.150	6.487	.130	6.247	.126
	(10.504)		(10.165)		(10.117)		(10.277)	
Firearm suicide	.136	.059	.224	.098	−.144	−.063	.085	.037
	(.699)		(.653)		(.665)		(.694)	

(Continues)

TABLE 5 (Continued)

Variable	Model 13		Model 14		Model 15		Model 16	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*
Three strikes law	−14.003	−.240	−12.436	−.213	−17.887	−.305	−13.997	−.240
	(10.704)		(10.570)		(11.272)		(10.686)	
Right to carry law	−12.009	−.194	−10.536	−.170	−11.391	−.184	−12.262	−.198
	(8.179)		(8.104)		(8.461)		(8.383)	
Constant								
y-intercept	41.637		45.054		53.757		39.496	
	(32.897)		(33.684)		(33.562)		(32.998)	
Observations								
State years	244		244		241		244	
r^2	.365		.376		.390		.373	

Notes. All independent variables are measured at t_1, except for College, which is measured at t_1 *minus* 1. All continuous independent variables are mean centered. Standard errors are in parentheses and are estimated using robust standard errors. We include 49 state dummy variables, not shown, to control for time-invariant, state-level characteristics and 4 year dummy variables, not shown, to control for national-level time trends.

$^{\dagger}p \leq .10$. $^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$ (two-tailed tests).

TABLE 6 PostOLS regression diagnostics for joint quadratic effects

Joint Variable	Wald Test for Joint Significance			Estimated Vertex		
	d.f.	F	*p*	Coefficient	SE	*p*
Total LWOP (thousands) and						
Total LWOP (thousands)^2	2 and 177	2.19	.114			
LWOP per capita and						
LWOP per capita^2	2 and 177	5.52	.005	−1.722	5.438	.752
LWOP per life sentence and						
LWOP per life sentence^2	2 and 174	1.81	.168			
%LWOP prisoners and						
%LWOP prisoners^2	2 and 177	3.53	.031	2.455	1.292	.057

is beyond the vertex, however, as shown in Figure 3, this effect increases by 0.7 crimes per 100,000 for each additional person per 10,000 residents added to LWOP. As Table 6 indicates, the vertex of this effect occurs at 1.72 inmates per 10,000 below the mean, but as the mean is only at 1.10 inmates per 10,000, this means that the slope is negative for *all* observations in our data set and getting more negative. If these predictions are accurate, it would suggest that increasing the proportion of residents who are sentenced to LWOP should lead to a small but increasing decline in the violent crime rate (excluding rape). In essence, at the mean (which is more than double the median), sentencing four additional persons to LWOP is predicted to prevent one nonrape violent crime.

The variables measuring the percentage of inmates serving LWOP demonstrate the same basic pattern, but as can be seen in Figure 4, the point at which the curve turns negative is in a much different location, which leads to vastly different conclusions. Model 16 in Table 5 shows that at the mean, increasing the percentage of inmates who are serving LWOP is predicted to lead to an *increase* in violent crime. At the mean, a one-percentage-point increase in inmates serving LWOP is predicted to increase the violent crime rate (excluding rape) by 3.4 crimes per 100,000. This effect, however, is

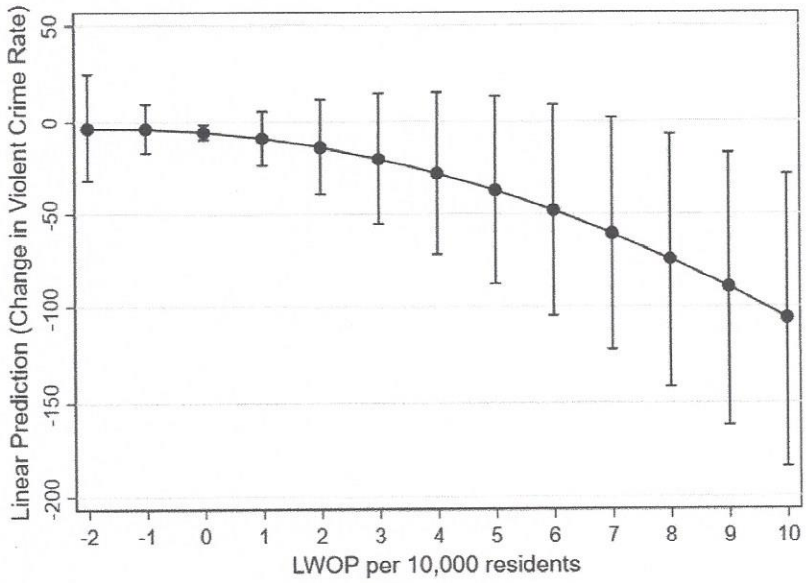

FIGURE 3 Predicted Change in Violent Crime Rate based on Joint Effects of LWOP per capita and LWOP per capita^2

Notes: Predictive margins with 95 percent confidence intervals. Zero on the x-axis equals the mean, since the measure of LWOP is mean centered.

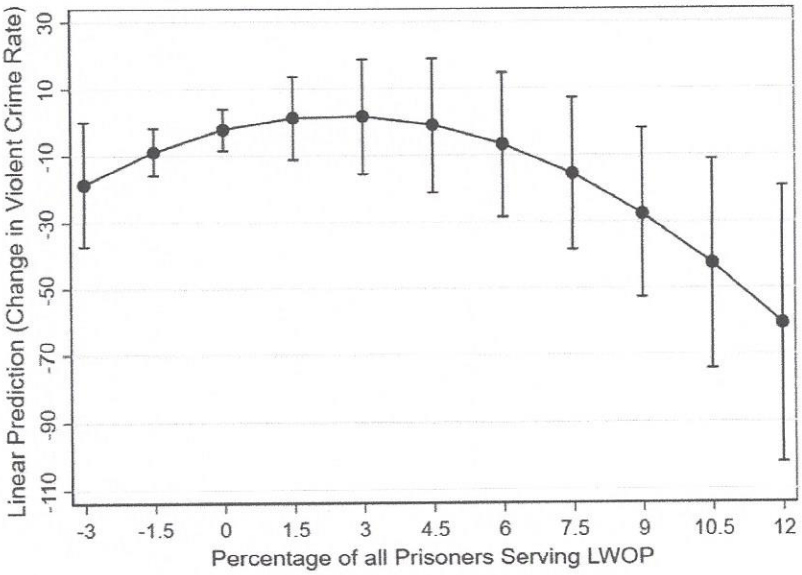

FIGURE 4 Predicted Change in Violent Crime Rate based on Joint Effects of %LWOP prisoners and %LWOP prisoners^2

Notes: Predictive margins with 95 percent confidence intervals. Zero on the x-axis equals the mean, since the measure of LWOP is mean centered.

expected to get smaller by 0.7 crimes per 100,000 for each percentage point increase in the percentage of prisoners serving LWOP, which as indicated by the vertex reported in Table 6, leads to the curve reaching zero at 2.46 percentage points *above the mean* and then turning negative at an increasing rate. As mentioned, though, most state years are *below* the mean, so for most state years in our data set, Model 16 predicts that increasing the percentage of prisoners serving LWOP will increase violent crime. Given the mean of 2.54 percent of prisoners serving LWOP, a state would need to have 1 in every 20 inmates (5.0 percent) serving LWOP to be on the downside of this curve. In our entire data set, only 38 state years have at least 5.0 percent of their inmates serving LWOP, and in 2016, only 10 states did. Even for most of those states, however, any reductions in crime they achieved by increasing the percentage of prisoners serving LWOP would likely be canceled out by earlier increases in the percentage of inmates serving LWOP and, thus, could likely also be achieved by *reducing* the percentage of inmates serving LWOP. It is also important to note that although the significance of these two variables in the quadratic models seems inconsistent with the findings in the models without the quadratic terms, the shape of these curves (increasing and then decreasing) are consistent with a finding of no linear effect (that is, an overall slope of close to zero).

5 | POLICY DISCUSSION

Whereas many nations around the world have already outlawed the use of LWOP (Henry, 2012; Nellis, 2013; van Zyl Smit & Appleton, 2019), the use of LWOP has continued unabated in the United States. Although the United States has reduced its use of the death penalty over the last two decades (Death Penalty Information Center, 2018), its use of "death-in-prison" sentences has been expanding at a far faster rate (Henry, 2012). From 1992 to 2016, the number of inmates serving LWOP quadrupled (Nellis, 2017). The United States now has more people sentenced to die in prison than the rest of the world combined (van Zyl Smit & Appleton, 2019). As the use of LWOP continues to expand and the death penalty continues to decline, the public policy debate over LWOP is likely to intensify. Indeed, in 2014, Pope Francis called for its abolition, referring to LWOP as "a hidden death penalty" (Gibson & McKenna, 2014), and in 2019, Pennsylvania's Lieutenant Governor, John Fetterman, began a campaign to encourage those sentenced to LWOP to apply for commutations in an effort to reduce that state's LWOP population (Melamed, 2019). As this debate heats up, it is critical that there is high-quality empirical research to help inform it; yet, to date, there has been no empirical assessment of LWOP's efficacy as a crime-fighting tool. Given the human rights concerns raised by LWOP, the high financial cost of LWOP sentences, and the racially disproportionate impact of LWOP, this is a glaring oversight. Such a dramatic expansion of the state's power to deprive its citizens of liberty should be rooted in evidence that such a practice is effective.

This study begins filling this gap by analyzing whether states that use LWOP more prolifically experience less violent crime or greater reductions in violent crime. Overall, the results suggest that LWOP may produce modest reductions in violent crime but that it is no more effective than life with parole. Specifically, in the models without a quadratic term, the data indicate that having more people serving LWOP—but not a greater proportion of the population serving LWOP—and that having a greater percentage of inmates serving LWOP are both associated with less violent crime. Neither variable was associated with *changes* in violent crime, however. Importantly, when assessing the *marginal* crime-reducing power of LWOP *relative to* life with parole, we found that the proportion of lifers who are ineligible for parole was not associated with changes in violent crime and was even associated with *higher* rates of violent crime (albeit the relationship was only marginally significant). These findings indicate that to the extent that incarceration can produce lower crime rates, the effect of increasing

sentencing severity maxes out at some point prior to LWOP. Thus, LWOP does not seem to produce any additional crime reduction beyond that which is produced by parole-eligible life sentences (and possibly by other long-term sentences).

Out of a concern that the initial models were failing to account for the potential of diminishing returns, however, we re-ran them with a quadratic term included. The quadratic models examining the relationship between LWOP and violent crime rates seem to confirm the findings of the initial models: Increases in the raw number of people serving LWOP and the percentage of prisoners serving LWOP are both associated with modest reductions in violent crime, but the *rate* at which LWOP is used and the proportion of lifers serving LWOP are not. The quadratic models looking at the relationship between LWOP and changes in violent crime, however, produced different results. Whereas none of the LWOP measures were significant in the initial model, the quadratic model suggests that the LWOP rate (but not its raw volume) and the percentage of prisoners serving LWOP are both associated with reductions in violent crime. Importantly, however, the variable measuring the proportion of lifers who are ineligible for parole was again not significant.

It is worth noting that the results of three of the four quadratic models that achieved statistical significance lead to the questionable conclusion that the states that use LWOP the most and the states that use it the least should have the least violent crime and experience the greatest reductions in violent crime, whereas the states that use LWOP moderately will experience the most violent crime and the smallest reductions in violent crime. The implausibility of this outcome leads us to conclude that the models without the quadratic terms are probably more accurate representations of reality. Finally, and perhaps most importantly, the variable measuring the proportion of lifers who are ineligible for parole failed to achieve traditional levels of statistical significance in any of our models, which indicates that even if LWOP is capable of reducing crime, it does not seem to have any marginal crime-reducing power beyond that which is accomplished by parole-eligible life sentences. The effect size in all of our models also indicates that if the effect of the LWOP to life proportion were real, it would lead to an *increase* rather than to a decrease in violent offending.

These conclusions are in line with what we would expect from the deterrence literature, which indicates that certainty of punishment is more important than its severity and that increasing already lengthy prison terms is not an effective way to fight crime (Nagin, 2013; Travis et al., 2014). They are also in line with what we would expect from the research indicating that both older inmates who are released and paroled lifers have extremely low recidivism rates (Advisory Committee on Geriatric and Seriously Ill Inmates, 2005; Anderson, 2019; California Department of Corrections and Rehabilitation, 2013; Justice Policy Institute, 2018; Mauer et al., 2004; Millemann et al., 2017; Rosenfeld et al., 2005; State of New York Department of Corrections and Community Supervision, 2016; Weisberg et al., 2011). Given LWOP's unique status as a sort of "semantically disguised" death sentence (Villaume, 2005, p. 266) or "death by incarceration" (see Gross, 2019), however, it was not clear whether the wider deterrence literature or the more specific death penalty literature was more applicable to LWOP. Unlike the deterrence literature, the death penalty literature has produced equivocal results and is beset with methodolical pitfalls that prevent any academic consensus from forming over its efficacy (Nagin & Pepper, 2012). Because of the relative size and stability of the LWOP population relative to the number of death sentences and executions, LWOP overcomes many of these hurdles and thus offers an opportunity to test the efficacy of "the new death penalty" (Ogletree & Sarat, 2012) with more stable and reliable statistical models. The results seem to confirm the "no marginal deterrence" perspective. That is, even though LWOP sentences might be producing modest reductions in crime, they do not seem to be any more effective than life with parole, and given the existing literature on deterrence and incapacitation, we suspect that the effect of increasing sentencing severity likley maxes out at some point less than life with parole. Therefore, to the extent that LWOP can be conceptualized as a type

of death sentence, our findings seem to support the findings reported in most of the sociological—but not the economic—literature on the death penalty that the death penalty is unlikely to be a more effective deterrent than LWOP or even life with parole—but based on a more stable statistical model than previous tests of the death penalty's deterrent effect.

Thus, when considering the racially disparate impact of LWOP and the tremendous financial and human costs associated with LWOP, LWOP does not seem to be a justifiable crime reduction strategy. As is true with most other aspects of the U.S. justice system, the use of LWOP is not equally distributed throughout society. Slightly less than three fifths of those serving LWOP in 2012 were African American (Nellis, 2013). Overall, in 2016, nearly half of all life sentenced inmates (both with and without parole) were African American, and two thirds were people of color (Nellis, 2017). Even more strikingly, 82.2% of those serving LWOP for a nonviolent offense are non-White, and 65.4% of them are Black (American Civil Liberties Union, 2014). Furthermore, this punishment comes with a hefty price tag. It costs more than $30,000 per year to incarcerate an inmate, and this cost more than doubles for inmates older than the age of 50 (American Civil Liberties Union, 2012; Erger & Beger, 2002; Henrichson & Delaney, 2012). There are more cost-effective means of reducing crime than locking up people into old age, such as investing in education, job training, and poverty-reduction programs (Beckett & Sasson, 2004). Lastly, LWOP comes at the cost of tremendous human suffering. In fact, as a result of concerns about human rights and respect for human dignity, many nations and international bodies have been debating the acceptability of life and LWOP sentences for decades (van Zyl Smit & Appleton, 2019), and in 2013, the European Court of Human Rights declared LWOP sentences to be a violation of fundamental human rights (*Case of Vinters and Others v. United Kingdom*, 2013). Similarly, many Latin American nations have outlawed LWOP on human rights grounds (Henry, 2012; van Zyl Smit & Appleton, 2019).

The results of this study thus have implications for policy makers in the United States and abroad as the status of LWOP is debated. Over the last quarter century, while many countries have abolished or reduced their use of LWOP, the United States has expanded its use of LWOP exponentially (Henry, 2012; Nellis, 2013, 2017; van Zyl Smit & Appleton, 2019). Yet, until now, there had been no empirical assessment of LWOP's efficacy. Although just a first step, the findings of this study suggest that policy makers should consider dramatically scaling back the use of LWOP unless and until more convincing evidence of the punishment's effectiveness can be produced. Before implementing a policy that is extremely costly to taxpayers, considered by many to be excessively cruel and inhumane, and racially disproportionate in its impact, there should at least be some evidence that the policy is effective. Our study fails to produce any compelling evidence that LWOP is more effective than lesser penalties. Simply put, states that deny a greater percentage of lifers an opportunity for parole do not experience measurably lower violent crime rates or greater reductions in violent crime as a result. As such, our study suggests that LWOP inflicts unnecessary suffering while exacerbating racial inequalities and wasting millions of taxpayer dollars per year.[6] Additionally, by eliminating an incentive to behave while in prison, LWOP sentences have the potential to increase violence in prisons, thus, endangering inmates and correctional staff. In fact, the limited empirical evidence that exists on this question suggests that although inmates serving LWOP are well behaved and less dangerous relative to those sentenced to short terms, they are slightly more violent than lifers who are eligible for parole and those serving sentences of 30 years or longer (although the differences are small) (Cunningham & Sorensen, 2006; Sorensen & Reidy, 2018, 2019). Coupled with the results of the present study, these findings suggest that policy makers should strongly consider eliminating or greatly reducing the use LWOP sentences.

Of course, crime reduction is not the only justification for LWOP. For example, some death penalty abolitionists have embraced LWOP as a palatable alternative to the death penalty (Barkow, 2012; Kleinstuber et al., 2016; Ogletree & Sarat, 2012; Seeds, 2018), whereas others are interested in LWOP

for retributive purposes (Robinson, 2012). These alternative rationales notwithstanding, LWOP's lack of effectiveness relative to life with parole at lowering crime rates should give policy makers a reason to reconsider the expanded use of LWOP. Although LWOP may sound like an appealing vehicle for reducing the use of the death penalty, LWOP is now being used far more expansively than the death penalty ever was and for crimes that have never been death eligible—including nonviolent crimes and crimes committed by juveniles (Henry, 2012; Kleinstuber et al., 2016; Montgomery v. Louisiana, 2016; Nellis, 2017; Ogletree & Sarat, 2012). Moreover, the use of LWOP as an alternative to the death penalty ignores the human rights concerns associated with death-in-prison sentences (Henry, 2012; Kleinstuber et al., 2016; Ogletree & Sarat, 2012; van Zyl Smit & Appleton, 2019).

The retributive value of a punishment, on the other hand, is not something that can be empirically measured as this rests on value judgments. There are, however, also reasons to question the use of LWOP for retributive purposes. For one, because LWOP punishes someone for the rest of their life, it can only be justified on retributive grounds for homicide offenses; yet, as we have already mentioned, LWOP is even being used for nonviolent crimes. Second, a truly retributive sanction would need to consider potential mitigating factors as well, but unlike the death penalty, most states impose LWOP automatically with no consideration of mitigating circumstances for some offenses (Kleinstuber et al., 2016; Nellis, 2010). These mandatory LWOP sentences, especially when used for nonhomicide offenses, disturb the proportionality balance required for retributive or "just desserts" models of punishment (van Zyl Smit & Appleton, 2019). Third, imposing LWOP on such a wide range of offenses and on such a large proportion of offenders trivializes "important differences in the moral blameworthiness among serious cases" and "undermines the criminal law's moral credibility" (Robinson, 2012, p. 139). As Robinson (2012) explained, from a retributive point of view, punishment should be designed to punish more serious and more blameworthy offenders more severely, but as LWOP is currently imposed in the United States, it treats a wide range of offenders with vastly different levels of culpability and moral blameworthiness the same. Therefore, even from a retributive perspective, LWOP should be limited only to those convicted of capital offenses and only after a sentencing hearing that allows for true consideration of both aggravating and mitigating circumstances. As such, regardless of what rationale one uses to justify the use of LWOP sentences, the evidence suggests that their use should be scaled back dramatically.

6 | LIMITATIONS AND FUTURE RESEARCH

It is important to note, however, that this study should not be considered the definitive word on this matter. It is just the first effort to analyze LWOP empirically. First, it must be pointed out that nonsignificant findings should not be confused with finding that there is no association. Failure to reject the null hypothesis does not imply that the null hypothesis is true. It simply means we cannot rule out the possibility that LWOP has no impact on violent crime rates beyond that which is accomplished by life with parole. Furthermore, our article only examines the impact of formal LWOP sentences, not virtual life sentences where the prisoner cannot possibly live long enough to become eligible for release (e.g., a 200-year sentence). Unfortunately, as we point out, there is no agreed upon cut-off for how long a sentence must be to qualify as a virtual life sentence, and there are no data on the number of inmates serving virtual life sentences prior to 2016 (Barkow, 2012; Nellis, 2017; van Zyl Smit & Appleton, 2019). Therefore, it is not yet possible to analyze the effect of virtual life sentences, but it might be in the near future. Similarly, as a result of a lack of available state-level data on lengthy prison sentences, we were only able to assess the marginal impact of LWOP relative to life with parole and relative to prison in general, but we could not analyze the impact of LWOP relative to other lengthy

prison sentences. Therefore, although we could demonstrate that LWOP does not seem to be any more effective than life with parole, determining whether life-with-parole sentences are any more effective than a lengthy term of years is beyond the scope of the present analysis.

Another shortcoming of this analysis is that data on LWOP sentences are only available periodically rather than every year. Even though the data do show substantial growth in the use of LWOP at the state level over time, these increases, while dramatic, are orderly, meaning there are no erratic swings in the data and the states remain ranked in approximately the same order from one time period to the next. Given the consistent growth observed in the LWOP measures over time, we suspect that the missing years would not substantively alter the results, but we cannot know this for sure. As a result, the findings of this study need to be interpreted with some caution.

Additionally, there are alternative ways of analyzing the data, specifying the models, and measuring whether crime has been reduced, which could impact the results. For example, our analysis focuses on whether *using* LWOP more often reduces violent crime (via either deterrence or incapacitation), but it is possible that the presence of a LWOP statute or the publicity surrounding LWOP is the thing that reduces crime rather than the actual use of the sanction. In the death penalty literature, for instance, several studies examine the impact of the presence of a death penalty law or the amount of news media coverage of executions rather than (or in addition to) the objective risk of execution (Bailey, 1998; Dezhbakhsh & Shepherd, 2006; Kovandzic et al., 2009; Stolzenberg & D'Alessio, 2004). Although we encourage such an analysis to be performed, as the results would clearly be useful and informative, knowing the effect of a penalty's presence or absence does not indicate how often that sanction should be applied (if at all). Additionally, it is possible that the presence or publicity of the threat of a sanction, even one as severe as LWOP, is not enough to deter unless or until the punishment is imposed. Therefore, even if future research focuses on the passage of LWOP statutes or on media publicity, it also needs to remain focused on the implementation of LWOP sentences. Furthermore, future analyses should consider using different types of statistical models and different control variables as this could potentially lead to different results and thus to a fuller and more nuanced understanding of LWOP's effects.

We strongly believe all of these alternative analyses should be done. As mentioned, the debate over LWOP is likely to intensify, so it is important to develop an extensive and robust body of research on LWOP to help inform both theory and policy. It is only by subjecting the data to multiple tests by different researchers using different plausible models that we can attain a degree of confidence in the findings and hope to achieve scientific consensus and influence lawmakers.

CONFLICT OF INTEREST STATEMENT

The authors confirm that they have no conflict of interest to declare.

ENDNOTES

[1] Although violent crime clearly occurs inside prison as well, these crimes are rarely reported in official crime data (Voorhees, 2014), and incapacitation theory and research are primarily concerned with crimes "outside the prison walls" (Canelo-Cacho, 2002, p. 809) rather than with violence inside prison.

[2] For example, The Sentencing Project defines a virtual life sentence as a sentence of 50 years or more (Nellis, 2017), the U.S. Sentencing Commission (2015) sets the cut-off at 470 months, and van zyl Smit and Appleton (2019) use 35 years.

[3] Given the range of LWOP sentenced prisoners in our data set, which can be seen in Table A2 in the Appendix, it would have been reasonable to measure LWOP as a straight count of people currently serving LWOP sentences. We chose,

however, to represent this variable in thousands so that the magnitude of the coefficient for this variable would appear in the quadratic models we run, thus, making it easier to illustrate the size of this variable's effect to the reader.

[4] Ideally, we would prefer to use the percentage of inmates serving long prison terms who are serving LWOP rather than the percentage of all inmates as it would better capture the relative impact of LWOP in comparison with a more similarly sentenced set of prisoners. Yet, as mentioned, data on the number of inmates serving lengthy prison terms are only available at the state level in 2016 (Nellis, 2017; van zyl Smit & Appleton, 2019).

[5] Running the regressions without mean-centering the variables indicates that "%LWOP prisoners" has an IRR (incident-rate ratio) greater than 1, which indicates that increasing the percentage of prisoners serving LWOP increases crime but at a decreasing rate because the squared term is negative. Once the effect becomes 0, LWOP causes crime to decline at an increasing rate.

[6] At a cost of more than $68,000 per year to house prisoners older than the age of 50 (American Civil Liberties Union, 2012), every 15 inmates older than the age of 50 released from prison would save $1 million per year.

[7] In an effort to get data on the legacy definition of rape for 2017, we requested and received the 2017 Uniform Crime Reports (UCR) master file from the FBI. Because the codebook included with the file was from 1990, however, which is prior to the establishment of the revised definition of rape, we were unable to decipher which variable (if any) represented the legacy rape definition.

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APPENDIX A: FURTHER DETAILS ON MODEL SPECIFICATION

Dependent Variable Selection

We use violent crime rates as the dependent variable for two reasons. First, from a statistical perspective, violent crime rates are far more stable than homicide rates. As mentioned in the main text, the standard deviation for homicide rates is large, which makes it difficult to distinguish between signal and noise and leads to highly erratic and unstable statistical estimates (Katz et al., 2003). Second, for the following three reasons, we see no logical reason to disaggregate homicide and violent crime rates: (1) Disaggregating violent crime from homicide assumes a concordance between the crime committed and the offender's intent that simply does not exist. Many aggravated assaults are the result of attempted murders in which the victim survived, and many homicides are the result of other felonies (such as robbery) that went wrong and in which death was never intended. In fact, interviews with incarcerated persons who fired a gun during their offense reveal that most did not intend to fire their gun prior to the moment they fired and did not shoot with the intention to kill (Wright & Rossi, 1986, pp. 92–93), and research by Zimring (1968) suggests that most homicides result from ambiguously motivated attacks rather than from a single-minded intention to kill. (2) Even if there was concordance between outcome and intent, there is little reason to assume potential criminals are aware of the nuances in criminal law that make some offenses eligible for LWOP and other similar offenses not. (3) Unlike the death penalty, LWOP is an available sentencing option for nonhomicide offenses, so it seems unlikely that any deterrent or incapacitating power that it possesses would be restricted to homicides.

We have chosen to exclude rape from our measure of violent crime rates for two reasons. First, rape is, by far, the most underreported violent crime. Whereas most aggravated assault and robbery victims report their victimization to police, less than a quarter of rape survivors identified in the National Crime Victimization Survey (NCVS) indicated that they reported the crime to police (Morgan & Kena, 2018, p. 7), and according to the National Intimate Partner and Sexual Violence Survey, the number of annual rape victims is nearly eight times greater than that reported by the NCVS (Breiding et al., 2014; Truman & Planty, 2012). Therefore, the number of reported rapes per state is extremely unreliable and subject to a high degree of randomness and measurement error. Second, beginning in 2013, the FBI revised its definition of rape. Although for 2013–2016, they continued to report the rate and number of rapes using both the old definition (known as the "legacy" definition) and the new definition (known as the "revised" definition) at the state level, in 2017, the FBI stopped releasing data on the number or rate of rapes at the state level using the legacy definition. Therefore, to ensure that we used a consistent measure of the violent crime rate throughout the sample period of our study, we were forced to exclude the rape rate from our calculation of the violent crime rate.[7]

Control Variable Selection

We selected our control variables because they are standard control variables used in macro-level analyses of crime rates—especially in studies of the death penalty. The age variables were chosen because, as we discussed in the literature review in the main text, there is a strong correlation between age and crime with teens and young adults being disproportionately involved in criminal offending and involvement in crime declining precipitously after one's mid-20s. Thus, the proportion of the population in the high-crime age range of 18–24 and the immediately older age range of 25–34, when people are beginning the desistance process, may impact the violent crime rate independent of any policy decisions. Additionally, although researchers do not agree on the reasons for this finding, UCR data consistently indicate that criminal offending is not evenly distributed among racial groups (Rosich, 2007; Schleiden et al., 2019; Siegel, 2015). Therefore, nearly all death penalty studies include some

variable that measures racial composition (Dezhbakhsh & Shepherd, 2006; Dezhbakhsh, Rubin, & Shepherd, 2003; Fagan, Zimring, & Geller, 2006; Katz et al., 2003; Shepherd, 2005; Zimmerman, 2004, 2006). To be consistent with those studies and to avoid misspecifying our models, we also control for racial composition by using percent non-White. Furthermore, we have included the proportion of the population with a college degree because, in addition to appearing in the death penalty literature (Kovandzic et al., 2009), increasing education levels have been empirically associated with reductions in violent crime (Groot & van den Brink, 2010; Lochner, 2004).

The poverty rate is included as a control variable because, as Hipp and Yates (2011, p. 956) pointed out, "[O]ne bedrock conclusion [across the field of criminology] is that the presence of more poverty is associated with more crime" (see also Hsieh & Pugh, 1993). We have decided to include a measure of employment because the link between unemployment and crime has been commonly examined in the academic literature, albeit with mixed results (Aaltonen, MacDonald, Martikainen, & Kivivuori, 2013; Chiricos, 1987). We have also decided to include the employment rate rather than the unemployment rate as this is a more accurate measure of the proportion of the population that is employed because the unemployment rate only includes people who are actively looking for work as unemployed (Bureau of Labor Statistics, 2015).

The number of police officers per capita is included because, as we discussed in the literature review, increasing police resources has been linked to reductions in crime. We chose to include a dummy variable measuring the presence or absence of a "three strikes" law because, as discussed in the literature review, there is a body of research linking these laws to changes in violent crime rates. We have also included the measures of firearm laws and presence because there is a large body of resarch analyzing the effect of gun control policies and of the presence of firearms on violent crime (National Research Council, 2005; Santaella-Tenorio, Cerdá, Villaveces, & Galea, 2016). The literature on RTC laws has produced inconsistent conclusions. For example, Lott and Mustard (1997) found that RTC laws reduce violent crime, but re-analysis of their data concluded that RTC laws have no effect on violent crime (Black & Nagin, 1998). More recently, Cook and Donohue (2017) and Donohue, Aneja, and Weber (2019) concluded that RTC laws *increase* violent crime rates. Therefore, although we are not certain what effect (if any) to expect from RTC laws, to avoid underspecifying our model, like Kovandzic et al.'s (2009) test of the death penalty's deterrent effect, we chose to err on the side of caution and include RTC laws as a control variable.

As discussed in the Method section, we include the "firearm suicide" variable as a proxy for the firearm ownership rate. The relationship between gun prevalence and violent crime is a controversial issue in American society, and the empirical literature reflects that uncertainty. This has been a heavily researched question, however, with most studies concluding that increases in firearm ownership are associated with higher rates of violent crime (Moore & Bergner, 2016; National Research Council, 2005; RAND, 2018). Although it cannot be deteremined whether this relationship is causal, the likely presence of this relationship suggests that we need to include a measure of firearm prevalence as a control variable. Out of a concern that the RTC and "firearm suicide" variables could act as confounds to each other as both could be indicative of an increased prevalence of firearms, we did extensive teting to ensure that this was not the case. The results are not reported here but are available upon request.

Although often included in models of violent crime, we chose to omit a measure of population density because it is not clear what this variable is capturing at the state level as states that have both large urban and expansive rural counties might end up with a middling overall population density that approximates a more suburban state. Furthermore, the population of the nation has increased over time, which means that including a measure of population density might really be capturing a time rather than a population density trend. A more appropriate measure would be the percentage of the population living in urban areas, but we could not use this variable because the U.S. Census Bureau ceased reporting this measure in 2012. Many analyses of crime and the death penalty also include a

TABLE A1 Correlation coefficients between LWOP and death penalty measures

Variable	Life Without Parole (LWOP)			
	Total	Per Capita	Per Life Sentence	Percent Prisoners
Death Penalty				
Total				
Sentences	.282***	.033	–.129	–.008
Population	.589***	.167**	–.046	.134*
Executions	.013	–.026	–.132*	–.092
Per Capita				
Sentences	.028	.107	–.073	.038
Population	.321***	.385***	.027	.239***
Executions	–.026	.077	–.009	–.009
Percent of Life and				
Death Sentence				
Sentences	–.065	–.061	–.072	–.089
Population	.024	–.005	–.058	–.087
Executions	–.065	–.027	–.053	–.076
Percent of Prisoners				
Sentences	–.019	.006	–.108	–.006
Population	.262***	.217***	–.042	.160
Executions	–.048	.012	–.056	–.054

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$ (two-tailed tests).

measure of income (Dezhbakhsh & Shepherd, 2006; Dezhbakhsh et al., 2003; Enter Katz et al., 2003; Kovandzic et al., 2009; Shepherd, 2005; Wright et al., 1999; Zimmerman, 2006); however, in our data set, this variable was highly correlated with "Poverty" and "College," so to avoid multicollinearity issues, we omitted this variable from the model.

As a result of the myriad concerns with measuring the death penalty noted earlier, we have also chosen not to include any measures of the death penalty as control variables in our model. As many states have been replacing the death penalty with LWOP, however, we were concerned that there may be an inverse relationship between a state's use of LWOP and its use of the death penalty that might mask LWOP's crime-reducing power (that is, the effects of increasing the use of LWOP and reducing the use of the death penalty might cancel each other out). Therefore, we ran a series of correlations between our measures of LWOP and 12 measures of a state's use of the death penalty: total number of death sentences imposed, total death row population, total executions, death sentences per capita, death sentences as a percentage of the total prison population, death sentences as a percentage of all life and death sentences imposed, the death row population per capita, the death row population as a percentage of the prison population, the death row population as a percentage of all life and death sentences imposed, the number of executions per capita, the number of executions as a percentage of the prison population, and the number of executions as a percentage of all life and death sentences imposed. The results, reported in Table A1, suggest that there are no correlations between use of the death penalty and use of LWOP that are both meaningful and significant, except for the correlation between size of the LWOP population and size of the death row population. Yet, this bivariate relationship is positive, suggesting that the effects (if any) of these variables would complement each other, not cancel each other out. Thus, there is no concern that excluding the measures of the death penalty might downwardly bias or suppress the results for our LWOP measures.

We recognize that by excluding the death row population variable, the models that use the size of the LWOP population as the independent variable run the risk of overestimating the effect of LWOP. To avoid the problems associated with including measures of the death penalty and to provide a test with the most favorable possible conditions for the LWOP variable as a guard against criticisms of trying to ensure the failure of LWOP as a policy, however, we decided excluding this variable was the best strategy. Nevertheless, out of an overabundance of caution, we re-ran Models 1 and 9 twice, once with the significant and meaningful death row population variable included and once with the significant but not meaningful death row per capita variable included, and the results (not reported here but available upon request) had only a negligible impact on the magnitude of the LWOP variable and did not affect its significance level.

Descriptive Statistics

The descriptive statistics for all variables used in our analysis are presented in Table A2.

Technical Details on Computing Negative Binomial Models

We use Stata 15™ to conduct all of our analyses. Because the time-series commands built into Stata have a known error when the NB2 form of the negative binomial distribution is run (Allison, 2009), we run our models using the *nbreg* command and include dummy variables for 49 of the 50 states and 4 of the 5 years to remove time-invariant state effects and time-varying national level trends. In addition, as this procedure produces confidence intervals that are too broad (Allison & Waterman, 2002), we rely on Stata's *vce (opg)* option to inflate our standard errors (Allison, 2009). To make interpretation easier, we report our results as both regression coefficients and incidence-rate ratios (IRRs), which are the exponentiated coefficients (Long & Freese, 2006; Rabe-Hesketh & Skrondal, 2012).

TABLE A2 Descriptive statistics of dependent and independent variables

Continuous Variables	Median	Mean	SD	Range			*n*
Violent crime	340.55	377.07	199.12	58.7	to	1152.2	250
Change in violent crime	–6.80	–7.11	29.96	–126.3	to	180.3	250
Total LWOP (thousands)	.19	.70	1.34	0	to	8.92	245
LWOP per capita	.51	1.10	1.57	0	to	10.41	245
LWOP per life sentence	.22	.31	.29	0	to	1	241
%LWOP prisoners	1.45	2.54	2.81	0	to	13.66	245
College	26.45	27.07	6.04	11.9	to	45.6	250
18–24	9.92	9.98	.76	8.17	to	13.36	250
25–34	13.49	13.83	1.61	8.92	to	18.91	250
Non-White	16.96	19.44	12.57	1.42	to	75.06	250
Population (thousands)	4,127.0	5,935.7	6,606.2	466	to	39,250	250
Poverty	12.55	12.98	3.44	5.8	to	24.6	250
Employed	61.90	61.99	4.44	48.3	to	72.5	250
Police per capita	2.32	2.42	.59	1.49	to	4.52	250
Firearm suicide	55.22	53.96	12.96	14.29	to	77.18	249
Discrete Variables	Percentage "Yes"			*n*			
Three strikes law	51.20			250			
Right to carry law	66.00			250			

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Life Without Parole, America's Other Death Penalty

Notes on Life Under Sentence of Death by Incarceration

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Life without parole is examined as a form of death penalty, namely, death by incarceration as distinct from death by execution. Original interviews with a sample of prisoners (condemned prisoners and life-without-parole prisoners) and prison officers are used to develop a picture of the experience of life under sentence of death by incarceration. It is argued that offenders sentenced to death by incarceration do not pose a special danger to others in the prison world or in the free world and that the suffering they experience is comparable to the suffering endured by condemned prisoners. Life without parole thus emerges as a viable alternative to capital punishment.

Keywords: *prison adjustment; life without parole; death by incarceration; death penalty; capital punishment; supermax*

Life without parole is sometimes called a "true life sentence" because offenders are sentenced to spend the remainder of their natural lives in prison. A better term for this sentence might be *death by incarceration*, as these persons are, in effect, sentenced to die in prison. Indeed, it is argued here that the sentence of life in prison without the possibility of parole can be equally as painful as the death penalty, albeit in different ways. The sentence can thus be thought of as "our other death penalty."

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Offenders sentenced to death by incarceration suffer a "civil death." Their freedom—the essential feature of our civil society—has come to a permanent end. These prisoners are physically alive, of course, but they live only in prison. It might be better to say they "exist" in prison, as prison life is but a pale shadow of life in the free world. Their lives are steeped in suffering. The prison is their cemetery, a cell their tomb. If we as a society were to limit life without parole to aggravated murders, as we try to do with capital punishment, it could be argued that lifers[1] give their civil lives in return for the natural lives they have taken (see Johnson, 1984, 1998). Under this formulation, use of life sentences for crimes short of capital murder would be excessive and unjust. By the same token, capital punishment would be entirely unnecessary, as capital murder would be adequately punished by "our other death penalty," death by incarceration.[2]

Objections to replacing death by execution with death by incarceration relate to public safety (e.g., are lifers a danger to others in prison or the outside world?) and adequacy of punishment (e.g., is a life sentence sufficient punishment for capital murder?). As we shall see, life without parole does not pose a special risk to public safety and is a sanction of great severity, arguably comparable to the death sentence in the suffering it entails. Moreover, it is worth noting that one of the unique features of death by incarceration is that it allows a large window of time—much larger than that afforded by the death penalty—for evidence of innocence to emerge and thus permits the release and perhaps compensation of persons wrongly sentenced to prison for life.

A Note on Method

In portions of this article, we draw heavily on McGunigall-Smith's unpublished doctoral research conducted at Utah State Prison from 1997 to 2002. McGunigall-Smith conducted structured, tape-recorded interviews with 7 of the 11 men on Utah State Prison's death row (4 inmates refused to speak with her) as well as with an opportunity sample of 22 prisoners serving life without parole and an opportunity sample of 34 staff members assigned to supervise condemned prisoners and prisoners serving life without possibility of parole. Given the limits of sampling (a small death row group and nonrandom samples of life sentence prisoners and correctional staff), we use quotations from interviews for two main exploratory purposes: (1) to illustrate themes widely shared by McGunigall-Smith's participants and (2) to shed further light on themes firmly established in the ethnographic literature on prison life and adjustment. For more details on method, consult McGunigall-Smith (2004a, pp. 89-107).

Public Safety

Lifers in Prison

Are prisoners sentenced to life without the possibility of parole a special danger to others in the prison, the setting in which they are slated to die? Executed prisoners are dead; dead prisoners pose no threats, whereas lifers are at least potential dangers to others in the prison. Some proponents of the death penalty warn us that lifers have nothing to lose and therefore will be uncontrollably violent, injuring or killing officers and inmates at will. In the absence of the death penalty, the speculation goes, "What more can we do to deter them from violence?"

As plausible as this scenario may seem, it is dead wrong. In fact, the opposite is true. A substantial body of empirical research supports the claim that lifers are less likely, often much less likely, than the average inmate to break prison rules, including prison rules prohibiting violence. Experience in both state and federal prisons reveals that the vast majority of lifers are manageable prisoners. McGunigall-Smith's (2004a) interviews with a sample of 22 life-without-parole prisoners in Utah State Prison did not turn up a single inmate who posed a serious disciplinary problem for staff or had a violent confrontation with staff. No inmates reported ever having been assaulted by staff (save one, whose allegation was dismissed by staff and other inmates). Similarly, McGunigall-Smith's (2004a) interviews with a sample of 34 correctional officers at the Utah State Prison did not turn up a single instance in which lifers were seen by officers as any more of a threat than other inmates.

Typical of the officers' observations in McGunigall-Smith's (2004b) research is this comment: "I'm as comfortable with them as with any inmate. An inmate is an inmate to me. I view them all as the same level" (p. 1). Officers, as a rule, told McGunigall-Smith that they knew the prisoners as inmates, not as offenders; it was the inmates' prison behavior that mattered to the officers, not their crimes and not their sentences. The general wisdom was that any inmate could pose a threat at any time. The prison behavior of lifers, however, led the officers to view them as no more of a threat, and often much less of a threat, than other prisoners. As one officer who worked in a building that housed lifers related to McGunigall-Smith (2004b), "the ones in this building I'm pretty comfortable with. I know them and know what they are capable of. I know what my rapport is with the inmates in this building. I feel pretty comfortable" (p. 2).

Lifers are sometimes said to have "nothing to lose" because they can never gain release from prison, but the small rewards of prison life are of

considerable value to them (see Johnson & Dobrzanska, 2005; see also Leigey, 2007). Prison is their involuntary home for life. Accordingly, lifers strive to make the most of the life that is available to them behind bars. Most lifers begin their prison sentence in maximum, and very often supermaximum, facilities; the very bleakest of prison existence. This experience often proves to be a profoundly painful immersion into the "belly of the beast" that dramatically highlights how much lifers have to lose and how hard prison life can be if they get into trouble. As a general matter, then, self-interest guides lifers to avoid trouble because trouble jeopardizes the few privileges they can secure in the prison world and, moreover, can land them in very grim living environments. "They cope probably better," one officer at Utah State Prison told McGunigall-Smith (2004b), because unlike short termers, "they learn how to work the system. They have the best jobs and they know how to get what they want. Their disciplinary records are smaller. The longer they are here the better they cope with the system" (p. 3).

In all but 1 of the 38 states that have the death penalty (New Mexico), capital murderers can be sentenced to death or to life without parole. Many death sentences are overturned on appeal,[3] with the offender typically released into the prison population with a life term (with or without parole eligibility). Significantly, research reveals that "former death row and life-sentenced capital inmates were disproportionately less likely to commit acts of serious violence in prison than non-capital offenders" (Cunningham, Reidy, & Sorensen, 2005, p. 308). Studies supporting these observations have been conducted in Texas, Missouri, Indiana, and Arizona (see Cunningham et al., 2005; Reidy, Cunningham, & Sorensen, 2001; Sorensen & Marquart, 2003; Sorensen & Wrinkle, 1998).

The premier study on the putative dangerousness of lifers was conducted in Missouri and covered an 11-year period (Cunningham et al., 2005). For our purposes, the populations under study included inmates serving sentences of life without parole for first-degree murder ($N = 1{,}054$) and inmates serving parole-eligible sentences ($N = 2{,}199$). All inmates were housed in maximum security, the level just below "supermax" prisons. Lifers were significantly less likely than parole-eligible inmates to be involved in violent misconduct (Cunningham et al., 2005, pp. 313-314). Only 1 of the 1,054 life-without-parole prisoners committed a homicide in prison. Moreover, prisoners eligible for parole were much more dangerous than life-without-parole prisoners. Indeed, parole-eligible prisoners were almost twice as likely to commit acts of violence as were life-without-parole prisoners and almost 4 times as likely to commit major assaults.

Nor are life prisoners a danger to citizens in the free world. The only means of egress from prison for these offenders, other than death, is by commutation or pardon. (Escapes from high-security prisons—by any prisoners, let alone lifers—are so rare as to pose a negligible threat to public safety.) As a practical reality, life-without-parole prisoners would only be pardoned if they were found to be innocent, in which case their release is entirely appropriate. Commutations are rare events for persons sentenced to prison, let alone a prison term of life without parole, as commutations are generally met with considerable political resistance. In the state of California alone, more than 2,500 offenders have been sentenced to life without parole since 1978; not a single one of these offenders has had his sentence commuted (Sundby, 2005, p. 38).[4] It is interesting that most lifers fully expect to die in prison. They may hope for release, but the dominant sentiment is defeat: "My sentence is natural without. . . . I don't *ever* expect to go out the front door. There is no possible way in all reality." Said another lifer, "I'll die here, hopefully soon" (McGunigall-Smith, 2004b, p. 4).

As a practical matter, it is life without parole that is the sure and swift sentence, not the death penalty. Moreover, life without parole is increasingly popular with the public—more popular in recent years than the death penalty (Death Penalty Information Center, 2006). Support for the death penalty drops dramatically when the sanction of life without parole is an option. The popularity of life without parole appears to reflect the belief that this sanction may be a better deterrent than the death penalty (because it is more certain) and, moreover, that life without parole is a penalty that spares us the risk of executing an innocent man or women. There is also the belief held by many that a life sentence without the possibility of parole guarantees that the offender will suffer greatly for the remaining days of his or her life.[5]

Life in Prison as Punishment

Life sentence inmates are manageable prisoners, some are even model prisoners, but their decent adjustment does not change the fact that their lives are marked by suffering and privation. Lifers do not adjust well because prison life is easy; they adjust well because self-interest moves them to make the most of a very difficult situation—a life confined to the barren, demeaning, and often dangerous world of the prison.

Some of us fail to appreciate the rigors of a life in prison because we do not believe prison is punishment. Prisoners are given a roof over their heads, three meals a day, and basic amenities like showers, recreation periods, and

even ready access to television. Some prisons are air-conditioned. Because prisoners do not have to work to be fed, clothed, and housed, it may appear—even to the inmates themselves—that they are being coddled. But the deeper reality is emotional, not physical, and it is the emotional aspects of prison life that inmates find enormously stressful. As one inmate told McGunigall-Smith (2004b):

> It may sound weird but the actual physical part of being here is really easy. It almost makes you feel like you're a baby because you're fed, all you're bills are taken care of. You don't have to do anything. You don't have to get out of bed in the morning if you don't want to. . . . Everything is provided. But, the emotional is hard. I hate this place with a passion. I cannot stand it. Sometimes I wake up and start looking around me and then I just lay there with my eyes closed because I just don't want to look at it. I don't want to see the concrete. I don't want to remember that I'm here. (p. 5)

One source of evidence on the extent of pain associated with a life sentence is provided by condemned prisoners who tell us point blank that a life sentence is worse than a death sentence. These are not just empty words. A remarkable 123 prisoners—11% of the 1,099 executions carried out at the time of this writing—have dropped their appeals and allowed themselves to be killed (Death Penalty Information Center, 2008). Some of these "volunteers," as they are sometimes called, lived on death rows that afforded more liberties and comforts than many maximum-security prisons. In Utah, for example, death row inmates with clean disciplinary records (which is true for the majority of condemned prisoners) have up to 6 hours out of the cell, during which time they can mingle with one another freely. They may have televisions (if they can afford to pay for them) in their air-conditioned cells. When Joseph Parsons, a Utah prisoner, dropped his appeals and was executed in 1999, his aim was not to get away from oppressive death row conditions. He wanted to get away from prison entirely, not just death row. Parsons made it quite clear that he preferred death in the execution chamber to life in prison: "I think it takes more courage to go on." In his view, "dying is easy . . . it takes guts to keep plodding along" (McGunigall-Smith, 2004a, p. 150).

In prison, Parsons made clear, "plodding along" means living an empty, futile existence. Visibly weary of life in prison, Parsons observed:

> There has to be something better than this. Nothing could be worse than this. I'm not a religious person—I'm not into God and all that and the Devil and all that stuff. But if you want to use a good analogy this has got to be hell right here. There can't be anything worse than this. What they say is hell, the fire

> burning, the torture and everything else, well at least you're doing something! Here . . . it doesn't make any sense to me. (McGunigall-Smith, 2004a, p. 135)

Six hours before he was executed, Parsons was asked about his feelings about his impending execution. He replied, "I'm not scared about the time between now and my execution. It's easy. The hard part is living every day here" (McGunigall-Smith, 2004a, p. 138). Asked if he had second thoughts, he replied emphatically, "Have I had second thoughts? No. I'm tired of being here" (McGunigall-Smith, 2004a, p. 153). Remarkably, Parsons was eager to face execution:

> I'm looking forward to this. The situation I'm in now is horrible. To me, I can't think of anything worse than this . . . to me, in my situation that I am in right now, this is the worst it could possibly be so it's a relief to know that I'm not going to be here no more . . . the next journey has got to be better than this one. All my bad karma came and hit me hard in this lifetime. I believe in good karma and bad karma. I got to figure in the next one I'm going to have a chance to do a little bit of good. (McGunigall-Smith, 2004a, p. 139)

Parsons never maintained that the physical conditions of his confinement were what drove him to drop his appeals. As he told McGunigall-Smith (2004a), "we've got three meals a day. We got a TV and a radio. We got air conditioning in summer (sometimes)" (p. 158). His life was hell in part because of the other people around him. Like Sartre (1949), he found hell in the fact that there was "no exit" from the company of people he held in contempt, some of whom (both inmates and guards) he characterized as "idiots." More important, Parsons stressed that he was never treated as a person, which is to say, shown respect and concern during incarceration. His degrading treatment was vividly brought home to him when he was sent to a civilian hospital for emergency surgery. His treatment there was in sharp contrast to his treatment as a death row prisoner:

> The hospital staff were good to me, and their attitude was that I was a regular patient. They were pretty nice to me actually. Being able to get up and walk around was what made me feel real good. They were talking and bullshitting with me and making me laugh . . . I was walking around the halls talking to people. It kind of felt like I was a human being. I almost felt like I was normal. (McGunigall-Smith, 2004a, p. 134)

It should be noted that Parsons was under very close supervision by prison staff during his stay at the hospital. The freedom he experienced was

psychological, not physical. Because he was treated like a person, he felt free of the prison and therefore felt like a normal human being, not a captive. Back in prison, Parsons felt once again as he had always felt—that he was not seen as normal, not treated as a human being.

Parsons reports that he was always attuned to the various indignities and slights of prison life, which he claims were forcefully brought home to him by inconsistencies in the implementation of prison rules and procedures. These inconsistencies, in turn, interfered with his personal daily routine, disrupting his life and highlighting his sharply limited autonomy. Parsons stressed that he was "tired to death" of inconsistency. He was disturbed by schedules that changed in small ways but nevertheless in ways he could not anticipate and plan for; he resented promises by staff that were not kept or were left pending for longer than he could bear, leaving him on edge. To survive, Parsons needed a firm daily routine in which to lose himself. What he found on death row were small but repeated departures from routine that left him anxious and uncertain.

For Parsons, life on death row was a precarious and exhausting battle to establish and maintain a routine with which he could live. More specifically, he sought a routine in which he could lose himself and not have to think about the indignity of a life lived in a place where he would never be a full-fledged human being, where he would never be treated as truly normal. Eventually, he simply ran out of energy. "I guess you have to deal with whoever and whatever comes in here," Parsons told McGunigall-Smith (2004a), "[but] I'm not dealing with it any more. I'm tired of dealing with it" (p. 153). The sheer effort of trying to forge a routine strong enough to allow him to live by habit, free from painful introspection, was too much for him. "Even if it did change drastically," Parsons observed, "I wouldn't change my mind. I'm already dead" (McGunigall-Smith, 2004b, p. 6). Death in the execution chamber looked better, much better, than life in prison as Parsons had come to know it.

Lifers, like Parsons and other execution volunteers, see many parallels between life sentences and death sentences. The lifers interviewed by McGunigall-Smith were asked which sentence they would prefer, a death sentence or a life sentence without the possibility of parole. The lifers were divided—eight chose the death penalty, eight chose life without parole (their current sentence), and six were ambivalent, sometimes preferring execution, at other times preferring life in prison. Typical of those who would choose death is the sentiment that life in prison is an exercise in futility. "Despite my best efforts," observed one lifer, "I lead a pointless, monastic existence with no end in sight . . . I live in hell" (McGunigall-Smith, 2004a, p. 214).

Note that this concern for a pointless, empty life, a kind of living hell from an existential point of view, is exactly what motivated Parsons to drop his appeals and hasten his execution.

Prisoners who chose life sentences did so, to paraphrase a common view, because where there is life, there is hope—for release. Nothing about prison life offered any intrinsic appeal; the goal of choosing life in prison was to achieve the extrinsic goal of release from prison. Prisoners who expressed ambivalence about which was worse, life in prison or death in the execution chamber, framed the choice as a struggle with two more or less equally unappealing options. Said one prisoner, "there are times when I think I would be better off [executed] just because we're not doing nothing at all [here in prison]" (McGunigall-Smith, 2004b, p. 7). Another man described an emotional journey in which an original preference for execution gave way to a grudging embrace of life in prison because prison life offered more pain, not less:

> In the beginning I did [want the death penalty]. I was feeling sorry for myself because I got caught. The death penalty, in my mind at that time, would have erased everything. I would have ceased to exist. The pain would cease. As time went by I grew to enjoy that pain. That pain woke me up. To me the death penalty is the easy way out. (McGunigall-Smith, 2004b, p. 8)

To call the death penalty "the easy way out" does not, in our view, minimize the pains of life under sentence of death by execution. Life on death row may well be a kind of psychological torture, as suggested by Parsons and supported in some research (see Johnson, 1998, 2003), but death row prisoners like Parsons have the legally valid choice to end that torturous existence by dropping their appeals and submitting to the judgment of the court.[6] Lifers have no comparable choice; the life sentence offers prisoners no legal way to end their suffering. Life in prison had been chosen for them and indeed imposed on them by the courts, and in this sense, their life sentences render them less autonomous than condemned prisoners.

Living in Prison for Life

Pains of Life Imprisonment

The pains of imprisonment—for inmates in general and lifers in particular—are not obvious to outsiders because they are not visible. As one life sentence prisoner insightfully observed, "prison can be compared with

the microwave oven in my kitchen at home—it destroys you on the inside long before it effects are evident on the outside" (Johnson & Toch, 2000, p. 138; see also Johnson & Toch, 1988). Outsiders find it hard to put themselves in the shoes of prisoners; the prison world is alien to most citizens, so removed from our daily life that prisons might as well exist on another planet. To fully appreciate the pains of life imprisonment, one has to look at the prison as it is experienced by the inmates who must live each and every day of their lives in confinement.

A central fact of life imprisonment from the inmate's point of view is a life of unremitting loneliness. The prisoner is permanently separated from his family and other loved ones, and with this separation comes a profound and growing sense of loss. Loss of family shows itself in ways big and small. Some inmates, for example, talk about the little things they miss greatly because they are separated from family. Not being around for the daily events that make up family life hits many prisoners hard. One man missed "the opportunity to go to a park with my nephews and nieces and spend time with them" (McGunigall-Smith, 2004b, p. 9). Said another, "my children will grow up and I won't get to enjoy them—high school, getting married, starting families" (McGunigall-Smith, 2004a, p. 207). Lifers know that they cannot be parents in the sense most of us understand the term, which is to say, they cannot guide and support their children: "I'm not there to say 'Honey, he wouldn't be good for you . . .' I'm not there to pat them on the back and I'm not there to pick them up when they fall. And that's the hardest part" (McGunigall-Smith, 2004a, p. 207; see also Johnson & McGunigall-Smith, 2006).

Lifers know that family ties are apt to wither over time and that family members, notably their parents, are likely to die while they are still alive in prison. Loss of a parent can be a terrible blow. "My father passed away last month," observed one lifer, "and I wasn't able to attend his funeral. That's probably the hardest thing I've had to deal with" (McGunigall-Smith, 2004a, p. 207). Said another prisoner, when asked to describe the greatest hardship he faced as he served his life sentence, "knowing my family is dying out there and moving away and I can't keep in touch with them" (McGunigall-Smith, 2004b, p. 10). The life sentence inmate must face the painful fact that one day he may be entirely alone, bereft of outside support or concern. "I don't have any contact with anybody on the streets," said one prisoner, "I don't know anybody . . . I don't have anybody to talk to, to connect with. This is my world now. This is all I know—the inside of these walls" (McGunigall-Smith, 2004b, p. 11; see also Jewkes, 2005).

Daily life on "the inside of these [prison] walls" is lonely as well. Inmates are often in the company of others but feel very much alone because they are surrounded by strangers who are indifferent, if not hostile, to their welfare. As one inmate put it:

> prison is coldness . . . no one in prison really cares about you, not like those at home do. It's a chilling feeling to realize that no one's life here would be significantly changed if I were to die tomorrow. Loneliness breeds and thrives in the belly of the monster known as prison. It strikes constantly and insidiously and it never goes away. (Johnson & Toch, 2000, p. 139)

When asked what was the most difficult thing about serving a life sentence, one inmate interviewed by McGunigall-Smith (2004b) said this, "No love. Nobody to grab hold of me and hug me. I mean real love. I'll never feel that emotion again" (p. 12). At the conclusion of another interview, a prisoner told McGunigall-Smith (2004a), "You're probably the first person I've talked to in fifteen years about stuff like my health—physical and mental. I never talk to anybody about anything" (p. 210).

Prison often is a debilitating place in which to live. A key feature of prison life is repetition. Each day in prison is essentially the same. The result is a lifetime of endless boredom, which prisoners tell us—and which we can readily imagine—is a terrible thing to endure. As one inmate observed,

> I awaken with a feeling of dread. A day in prison offers nothing to look forward to. It is an existence of endless repetition, restriction, and regimentation. . . . Prison is sameness, day after day, week after week, year after year. It is total confinement of body and spirit and total separation from everything real and important. (Johnson & Toch, 2000, pp. 138, 140)

Part and parcel of a repetitive routine is loss of choice. "The thing I miss most," said one lifer interviewed by McGunigall-Smith (2004b), "is the right to choose. I no longer have any choice—when I shower, where I go, what I do" (p. 13). Each day brings mortifications that remind prisoners of their helplessness and the sheer loss of dignity they suffer in a world in which no one recognizes their inherent worth as human beings (see Todorov, 1996, p. 59). A mundane but telling example offered by one inmate: "Having to ask a guard for toilet paper. You could ask ten times in a period of three to four hours for such an item. Things like this amount to cruel punishment" (McGunigall-Smith, 2004b, p. 14). Lifers are perhaps especially sensitive to such slights because they are experiencing the cumulative effects of lack of autonomy. Their dignity as self-determining human beings has been taken

from them, and they, unlike other inmates, cannot look forward to a time when they will leave prison and perhaps regain their status as full-fledged human beings.

Prisons are experienced by inmates as settings of deprivation. Locking people up means locking them away from the free world with its variety and opportunity that is now replaced with a deadening routine of lock-ins and lock-outs, of group feedings and group movements; it means locking people away from loved ones who are now replaced by strangers and keepers, few of whom even know their names let alone care about them; it means locking prisoners away from the many simple things we all enjoy, like good food eaten in good company and moments of treasured privacy. The life of the lifer is made up of many small losses, which cumulate and leave the prisoner with a sense that he (or she) has no dignity or worth as an individual.

At the core of the prison experience, of course, is the loss of freedom. In a sense, loss of freedom is experienced as the sum of the various deprivations and hurts inherent in confinement. As one inmate observed, prisoners ultimately have no choice other than to submit to the prison:

> For the prisoners, the loss of freedom is devastating. Everything they have taken for granted is gone. They have no control over their lives, no choices. Others decide when and where they eat, work, and sleep. . . . Their lives are fastened to rules and regulations that discourage and disregard normal impulses. They accept the rules and adjust to them, just as they do to the overcrowded conditions, body odors, lack of privacy, standing in lines, and the like. They have no choice. (Johnson & Toch, 2000, p. 141)

Adjusting to a Life of Prison

All prisoners, not only lifers, are held in a kind of suspended animation, the social equivalent of a coma, while the rest of the world changes and evolves. The free world is dynamic, the prison world static. By its very nature, the free world offers hope for change. Prison, by its very nature, isolates the offender and holds hope hostage until the offender is released. Lifers, unlike regular prisoners, will never be released, so life as they know it ends at the prison gate. For them, a life sentence is a death sentence. "Being given a life sentence," observed one prisoner, "is like being told by a doctor that you're going to die, you know, like you've got a terminal illness. You feel as if your life's effectively over" (Jewkes, 2005, p. 366). A life of prison may also be like being told by your doctor that you must be put into a coma, never to return to normal consciousness and normal human interaction. It is

interesting that most people in the free world rank a coma as worse that death (Dinger, 2005; Mold, Looney, Viviani, & Quiggins, 1994).

An overarching concern of lifers is whether they will be able to make it through their sentence and at what cost to them as human beings. One's life in the free world is "effectively over," but one's life as an inmate has only just begun. In one inmate's words:

> I don't know how I'm going to [make it]. There's a man who lives next door to me. He's about seventy years old and his crime was multiple murders back in the sixties. He has been in here ever since. . . . Sometimes I wonder if and how I'm going to manage living in here that long. I think when you come to prison you stop developing which is why he is also very childish. He got arrested at a very young age like me and I wonder. I think it's pretty obvious that I stopped developing the minute I was arrested. You don't develop in here. That stops and you are basically stuck at whatever age you were when you were arrested. So, I see this seventy year old man with the mentally of a twenty-three year old and I was arrested when I was nineteen. (McGunigall-Smith, 2004b, p. 15)

Some correctional officers are keenly aware of the travails of lifers and in fact consider a life sentence to be worse than a death sentence. Said one officer:

> I think that's [LWOP] harder to face than the death penalty in the sense that they know they are going to live the rest of their life in this kind of an environment. They are not going to get out and be able to be with their families and loved ones again. I think that's a little harder—they just go on day after day wondering when they are going to die. It's a sorry situation to be in for that long. (McGunigall-Smith, 2004b, p. 16)

The time-honored approach to coping with adversity, including prison adversity, entails taking things one day at a time, focusing on the present (over which one has some control) and ignoring the past and future, over which one has no control and, in all likelihood, apprehensions or regrets (Cohen & Taylor, 1972; Johnson, 2002; Toch, 1975). Typical comments recorded by McGunigall-Smith (2004b) included "one day at a time, only way to do it" or "just like I've been doing—one day at a time" (p. 17). The simplicity of such statements hides an underlying complexity. Probing reveals that there are conditions—like personal flexibility and environmental stability—under which the simple "keep your head down and stay in the present" approach may depend.

"One day at a time and hope to remain flexible enough to find one more thing to keep me going," said one man, when asked how he coped with his

life sentence (McGunigall-Smith, 2004b, p. 18). Elaborating on his adjustment strategy, he observed, "I tend to pick projects that at least last a year so that I don't have to think of this 'fate worse than death' for at least a whole year." The "enormity of the amount of time they have handed me," he continued, "becomes overwhelming, at least for me to manage emotionally. I would like to think I would be able to do it just as I'm doing it right now—a positive outlook, a limited hopeful outlook." Upon further questioning, we learn that this "limited, hopeful outlook," in turn, is contingent on environmental conditions that

> could change within the next year if the trend keeps going the way it goes with privileges and lockdowns and the violence and stuff like that. It's hard to maintain any type of positive character traits after you've been exposed to this for so long. (McGunigall-Smith, 2004b, p. 18)

If things are bad enough for long enough, coping efforts fail and, in his words, "you kind of succumb to the environment." A year or so after this interview, the prisoner violated a rule and was moved to a more restrictive environment, which presumably interfered with his adjustment projects and brought home the "enormity of the amount of time they have handed me." Soon thereafter, he took his own life.

The better adjusted prisoners, and especially the lifers, work with the prison's routine. For them, the larger routine—the counts and mealtimes, the out-of-cell times and lights-out times—is like an anesthetic. The rhythm of the prison day dulls the pains of loss and regret. This daily routine makes for a repetitive, empty existence, as we have noted, but for most, it is a bearable one. Prisoners put themselves on automatic pilot and try not to think about their lives. Within the structure, lifers typically forge more personal routines that give some meaning to their days. Here are two typical comments drawn from McGunigall-Smith's (2004b) interviews:

> I try to change my routine or vary it a bit. I have my mainstays but I change a few things now and then just to get a little bit of variety. But a routine keeps my sanity. (p. 19)

> It allows me to divide time up into parts that I can manage and it gives my life a cadence and consistency and predictability and offers the illusion of control. (p. 20)

When prison conditions deteriorate—when there are "lockdowns and the violence and stuff like that"—daily life becomes unstable or oppressive.

Under these conditions, the helpful "bit of variety" and the comforting "illusion of control" found in one's personal prison routine are lost and prisoners suffer great stress. McGunigall-Smith (2004a) called this stress the "pains of inconsistency," which are reflected in the following interview excerpts:

> Days start getting real long if you break your routine. The way they do things here they move you around so much—change rules and stuff every day. That gets to you. (McGunigall-Smith, 2004b, p. 21)

> Since the lockdown they have been doing a lot of shakedowns—every day. The fight took place in another building but we are suffering. . . . Shakedowns are very upsetting to our routine. It's hard to relax. I have seen an inmate, who has had enough of this, start banging his head on the wall—that's what's going to happen. (McGunigall-Smith, 2004b, p. 22)

Routine provides stability and predictability for prisoners. Lifers want to live life on the surface of things, by habit and rote. Below the surface calm, they know from experience, lies a deep well of loss and discontent.

Punishment, Ruined Lives, and the Limits of Retribution

Prisoners, and especially lifers, have made a tragic mess of their lives; if they dwelled on this sad fact, they'd drive themselves to distraction. The battle to maintain workable routines, discussed earlier, is a battle to keep these ugly thoughts at bay. At times, however, prison life is utterly and completely superseded by events from the outside world—loved ones come to you with a problem and you cannot help; a visit is missed and you wonder why; you do not get mail and you wonder why. In situations such as these, prisoners are shaken from their personal routines as well as from the routine structure of daily life behind bars. As a result, they are painfully reminded that they are prisoners, that they got themselves into this mess, and that the future is bleak. As one prisoner observed:

> You're coping pretty well when you get one of those painful reminders of your situation. One of three events occurs or recurs. You learn of a family problem that demands your presence to handle, and you understand the meaning of being helpless. The problem would be nothing if you were not in prison, but now it seems enormous because you can't deal with it. It makes you brood, feel the shame of what you are doing to your loved ones and appreciate the fact that you are a pretty disgusting person. The other two events are visiting hours without a visitor and mail being delivered without a letter for you, which is the definition of loneliness. It makes you think a lot

> about home, loved ones, friends, the world outside. You remember little things you did before this; they were unimportant then, but now you realize they were very important. (Johnson & Toch, 2000, p. 142)

It is at these junctures—when the free world intrudes into the prison, awakening prisoners from their prison-induced comas—that the most fundamental pain of imprisonment is revealed, for it as these times that prisoners look at themselves and at their lives. Almost invariably, they are deeply distressed by what they see:

> Like it or not, you are being exposed to who you really are way down deep inside. It becomes increasingly difficult to hide from yourself. Often you find yourself lost in the darkest crevices of your being and not too happy with what you are finding. You are hesitant to continue but you do, hoping for the best, finding the worst. Constantly you are thinking, thinking, and thinking. It happens while you are working, pacing your cell floor, waiting for a letter or a visit, while you are mopping floors or performing some other robot work you've been assigned, or as you lie awake at night wishing for the escape of sleep. The layers of your character are getting peeled away like the skin of an onion, and don't expect flower buds to be hidden at the core. (Johnson & Toch, 2000, p. 142)

This inmate's reference to the pains of reflection when you pace your cell or lie awake at night is quite significant. Anytime an inmate's mind breaks from the prison routine and drifts to the past, there is the palpable risk that "the demons of the past will chase you and you re-run the scenarios of the past, you think of what you could have done, what you could have been" (McGunigall-Smith, 2004a, p. 207). The catalog of regrets provided by McGunigall-Smith's respondents ranges from people one has let down and hurt to opportunities missed to live decently or indeed to have a life at all:

> Not being there for my daughter. I once vowed that I would be there for her always. I kick myself that I can't. (McGunigall-Smith, 2004b, p. 23)

> Seeing my mom get all upset. . . . Not being able to hold her or touch her. Not being able to live my life. . . . Not being able to have a life. (McGunigall-Smith, 2004b, p. 24)

> Just thinking about your time, what you did, remembering how stupid you were when you were out [in the free world]. (McGunigall-Smith, 2004b, p. 25)

> Out there I just lived for drugs and the rush, and all that—it was stupid. The worst part is that I won't have a chance to get it right. (McGunigall-Smith, 2004b, p. 26; see also Johnson & McGunigall-Smith, 2006)

The most basic hurt inflicted by life without parole is this: a lifetime of boredom, doubt, and anxiety punctuated by piercing moments of insight into one's failings as a human being. As one inmate told McGunigall-Smith (2004b), "my life is ruined for life; there is no redemption, and to some that is a fate worse than death" (p. 27). This miserable existence only ends when the prisoner dies—alone, unmourned, a disgrace in the person's own eyes as well as in the eyes of society (Aday, 2003).

If our goal is to make prisoners suffer greatly for the rest of their lives, life imprisonment without the possibility of parole offers itself as perhaps the ultimate punishment we can inflict. If our goal is justice, the bedrock principle of proportionality in punishment requires that we reserve this ultimate punishment for the ultimate crime: capital murder. Once we accept death by incarceration as our ultimate legal sanction, moreover, we should provide to all defendants facing this sanction the same legal safeguards and appellate procedures presently afforded to capital defendants. The oft-heard refrain that "death is different" explains the special attention to procedure in capital trials and subsequent appellate review. Death by incarceration is different as well. Our research leads us to conclude that death by incarceration is just as final, just as painful, and just as worthy of the careful scrutiny to which we subject traditional capital sentences.

Notes

1. For the purposes of this article, we variously refer to those serving life without the possibility of parole as "life sentence prisoners," "LWOP prisoners," or simply "lifers."

2. We limited our research to offenders sentenced to life without parole. Persons sentenced to prison terms that exceed the human lifespan also suffer death by incarceration. Prisoners who get a sentence measured in hundreds of years, for example, serve what Villaume (2005) has called "virtual" death sentences. Following our analysis, such offenders are undergoing death by incarceration—our other death penalty—and should only be sentenced to such terms for capital murder. A more difficult category of cases noted by Villaume includes offenders sentenced to prison terms that, though not longer than the human lifespan, exceed the amount of time those offenders likely have left to live. A 70-year-old offender who gets a 20-year sentence, for example, is likely to die in prison. This area of sentencing bears further analysis. Our thinking at this point is that such sentences are not intended as death sentences even if death in prison is the likely result. The elderly offender's death before he completes a 20-year sentence, for example, is a by-product of the sentence, not its goal or expected outcome. The same would be true of a very ill offender; he or she might die during the prison term, even a short prison term, but the sentence was not meted out as a death sentence. With sentences of death by execution, life without parole, and 100-plus-year sentences, on the other hand, death behind bars is the intended result of the sentence.

3. Just under one third of all those condemned to die subsequently have their sentence or conviction overturned, and 2% have their sentence commuted. More than 120 prisoners have

been exonerated and subsequently released from death row since 1973 (Death Penalty Information Center, 2004).

4. Many, if not most, of these sentences were meted out for crimes short of murder and are, in our view, excessively harsh and therefore unjust (see Mauer, King, & Young, 2004). Regrettably, life without parole was originally created to offer capital juries an alternative to the death penalty in the sentencing phase. Juries are in fact less inclined to impose capital punishment when life without parole is an option, but life without parole has, as it were, taken on a life of its own as a penalty for noncapital crimes (see Appleton & Grover, 2007; Note, 2006).

5. "I'm glad he's not going to breathe another free breath," said one prosecutor. "He'll spend the rest of his life in prison, and he'll lead a miserable existence" (Mudd, 2006, p. A1).

6. This choice may be ethically suspect, but the prisoners who decide to drop their appeals, like Parsons, describe the decision as empowering.

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Accounting for Adolescents' Twice Diminished Culpability in California's Felony Murder Rule

Raychel Teasdale

ACCOUNTING FOR ADOLESCENTS' TWICE DIMINISHED CULPABILITY IN CALIFORNIA'S FELONY MURDER RULE

*Raychel Teasdale**

In 2018, the California legislature passed S.B. 1437 to narrow California's felony murder rule and theoretically apply the rule only to those with the greatest culpability in a murder. However, whether intentionally or negligently, the law leaves room to disproportionally and unjustly affect adolescents by charging those with "reckless indifference" with first-degree murder. Imbedded in psychology and neuroscience research is the conclusion that adolescent brain structure and function are still rapidly developing. As a result, adolescents are less able to weigh the risks of their actions, resist peer pressure, regulate their emotions, and control their impulses. Therefore, this Note argues that the "reckless indifference" standard under California Penal Code section 189 should not apply to adolescents because they are inherently reckless. Instead, to charge an adolescent with first-degree murder, prosecutors should be required to prove the mens rea typically associated with first-degree murder. Further, before charging an adolescent with second-degree murder under a felony murder theory, a judge should be required to analyze the youthful offender's culpability, accounting for their age and environment.

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I. INTRODUCTION

The California Supreme Court has repeatedly stated that the felony murder rule is a "'highly artificial concept' which deserves no extension beyond its required application."[1] Further, it recognized that the rule "anachronistically resurrects from a bygone age a 'barbaric' concept that has been discarded in the place of its origin" and "erodes the relation between criminal liability and moral culpability."[2] Nevertheless, the felony murder rule still exists as a statute in California and contributes to overly harsh and unfair sentences for youthful offenders who are categorically less culpable than adults due to their cognitive and psychological development.[3]

In 2007, over 2,500 individuals in the United States were serving life without parole for crimes they committed as minors, and as measured in 2005, 26 percent of minors serving life without parole were convicted of felony murder.[4] In California, there are around 5,206 individuals serving life without parole for felony murder, and

1. People v. Dillon, 668 P.2d 697, 709 (Cal. 1983) (quoting People v. Phillips, 414 P.2d 353, 360 (Cal. 1966)); *accord* People v. Henderson, 560 P.2d 1180, 1183 (Cal. 1977); People v. Satchell, 489 P.2d 1361, 1365 (Cal. 1971).

2. *Dillon*, 668 P.2d at 709 (quoting *Phillips*, 414 P.2d at 360 n.6); *Dillon*, 668 P.2d at 709 (quoting People v. Washington, 402 P.2d 130, 134 (Cal. 1965)).

3. This Note addresses individuals who are both below and above the age of eighteen, regardless of whether they are processed in either the juvenile or adult criminal justice system. Throughout the Note, the term *minor* is used to describe individuals under eighteen. *Youthful offender* is used to describe individuals under age twenty-five, and *adolescent* describes individuals between twelve and twenty-five years old, a period of time that psychologists have defined as a period of heightened development. *See* Laurence Steinberg & Robert G. Schwartz, *Developmental Psychology Goes to Court*, *in* YOUTH ON TRIAL: A DEVELOPMENTAL PERSPECTIVE ON JUVENILE JUSTICE 9, 27 (Thomas Grisso & Robert G. Schwartz eds., 2000) ("[M]ost identity development takes place during the late teens and early twenties."); Alan S. Waterman, *Identity Development from Adolescence to Adulthood: An Extension of Theory and a Review of Research*, 18 DEVELOPMENTAL PSYCHOL. 341, 355 (1982) ("The most extensive advances in identity formation occur during the time spent in college."). In this Note, the term *juvenile* is used to describe someone under the jurisdiction of juvenile court, which is consistent with California Welfare and Institutions Code section 602. CAL. WELF. & INST. CODE § 602 (West 2019) ("[A]ny minor who is between 12 years of age and 17 years of age, inclusive, when he or she violates any law of this state or of the United States or any ordinance of any city or county of this state defining crime other than an ordinance establishing a curfew based solely on age, is within the jurisdiction of the juvenile court.").

4. ELIZABETH CALVIN ET AL., HUMAN RIGHTS WATCH, AGAINST ALL ODDS: PRISON CONDITIONS FOR YOUTH OFFENDERS SERVING LIFE WITHOUT PAROLE SENTENCES IN THE UNITED STATES 1 (2012); AMNESTY INT'L & HUMAN RIGHTS WATCH, THE REST OF THEIR LIVES: LIFE WITHOUT PAROLE FOR CHILD OFFENDERS IN THE UNITED STATES 1 (2005), https://www.hrw.org/sites/default/files/reports/TheRestofTheirLives.pdf.

nearly 62 percent were twenty-five years or younger at the time of the offense.[5]

In light of staggering statistics like these, courts, legislatures, and voters have started to understand that youthful offenders are incarcerated at an alarming rate, and juvenile justice reform has been gaining traction. Within the past fifteen years, the United States Supreme Court decided that: (1) minors cannot be sentenced to the death penalty;[6] (2) minor non-homicide offenders cannot be sentenced to life in prison without parole;[7] (3) a suspect's age is relevant in determining whether a reasonable person would consider themself in custody for *Miranda* purposes;[8] (4) a sentencing scheme that mandates life in prison without parole for minor homicide offenders is prohibited and the court must first consider the offender's age and circumstances;[9] and (5) the new required sentencing considerations apply retroactively to final dispositions.[10]

In addition, California made its own recent advancements in juvenile justice reform, recognizing that youthful offenders are different than adult offenders. California decided that: (1) a hearing considering mitigating factors tied to youth is required before a prosecutor can file a petition to transfer a juvenile to adult court;[11] (2) youthful offenders under sixteen cannot be transferred to adult criminal court;[12] (3) individuals convicted of an offense committed before the individual was eighteen years old, and sentenced to life without the possibility of parole, are eligible for parole after their

5. *Statistics*, FELONY MURDER ELIMINATION PROJECT, https://www.endfmrnow.org/new-statistics (last visited Sept. 29, 2019).

6. Roper v. Simmons, 543 U.S. 551, 568 (2005).

7. Graham v. Florida, 560 U.S. 48, 74 (2010).

8. J.D.B. v. North Carolina, 564 U.S. 261, 277 (2011).

9. Miller v. Alabama, 567 U.S. 460, 479–80 (2012).

10. Montgomery v. Louisiana, 136 S. Ct. 718, 729 (2016) (applying the holding of *Miller*, 567 U.S. at 732, retroactively).

11. CAL. SEC'Y OF STATE, OFFICIAL VOTER INFORMATION GUIDE FOR 2016, GENERAL ELECTION 54–59 (2016), https://repository.uchastings.edu/cgi/viewcontent.cgi?article=2342&context=ca_ballot_props.

12. S.B. 1391, 2017–2018 Leg., Reg. Sess. (Cal. 2018). While prosecutors have alleged that S.B. 1391's retroactivity is unconstitutional, the resistance to S.B. 1391 is not relevant to this Note and does not alter the legality of the law. *See* Janet Cooper Alexander et al., *Constitutionality of Senate Bill 1391*, CAL. LEGAL SCHOLARS (Feb. 2019), https://fairandjustprosecution.org/wp-content/uploads/2019/02/1391-Constitutionality-Sign-on-Letter-FINAL.pdf; Erwin Chemerinsky, *Prosecutors' Attack on Youth Justice Reform Undermines Democracy*, SACRAMENTO BEE (Feb. 11, 2019), https://www.sacbee.com/opinion/california-forum/article225921805.html.

twenty-fifth year of incarceration;[13] and (5) juvenile court generally does not have jurisdiction over offenders under age twelve.[14]

Ultimately, research in neuroscience and developmental psychology has forced courts and legislatures to pay attention to the problem with sentencing youthful offenders to disproportionately long sentences.[15] Because adolescents' brain structure and function have not finished developing, and they are undergoing rapid neural plasticity, it is difficult for adolescents to weigh the risks of their actions, resist peer pressure, regulate their emotions, and control their impulses.[16] As a result, youthful offenders are less culpable than adult offenders and, ultimately, should not be charged or sentenced in the same way as adult offenders.[17]

Due to adolescents' rapidly changing cognitive and behavioral development, the punishment justifications for felony murder, retribution and deterrence, lose credence when applied to youthful offenders.[18] Retribution is inappropriate because youthful offenders are less blameworthy, and deterrence is inapplicable because

13. S.B. 394, 2017–2018 Leg., Reg. Sess. (Cal. 2017).

14. S.B. 439, 2017–2018 Leg., Reg. Sess. (Cal. 2018). This bill excludes rape and murder cases.

15. Miller v. Alabama, 567 U.S. 460, 472 n.5 (2012) (adopting this rationale as one of the bases for the Court's decision, which was previously articulated in Graham v. Florida, 560 U.S. 48, 68 (2010), and Roper v. Simmons, 543 U.S. 551, 553 (2005)).

16. Brief for the American Medical Association & the American Academy of Child & Adolescent Psychiatry as Amici Curiae in Support of Neither Party at 4–14, Miller v. Alabama, 567 U.S. 460 (2012) (Nos. 10-9646 and 10-9647), 2012 WL 121237, at *4–14 [hereinafter AMA Brief]; Brief for the American Psychological Association, American Psychiatric Association, National Association of Social Workers, & Mental Health America as Amici Curiae Supporting Petitioners at 6–19, Graham v. Florida, 560 U.S. 48 (2010) (Nos. 08-7412 and 08-7621), 2009 WL 2236778, at *6–19 [hereinafter APA Brief]; Marsha Levick et al., *The Eighth Amendment Evolves: Defining Cruel and Unusual Punishment Through the Lens of Childhood and Adolescence*, 15 U. PA. J.L. & SOC. CHANGE 285, 298–99 (2012).

17. Graham v. Florida, 560 U.S. 48, 69 (2010).

18. *Miller*, 567 U.S. at 472 ("Because '[t]he heart of the retribution rationale' relates to an offender's blameworthiness, 'the case for retribution is not as strong with a minor as with an adult.'"); *Graham*, 560 U.S. at 72 (quoting *Roper*, 543 U.S. at 571) (stating that deterrence does not justify a life without parole sentence because "the same characteristics that render juveniles less culpable than adults suggest . . . that juveniles will be less susceptible to deterrence"); *Roper*, 543 U.S. at 571 ("Once the diminished culpability of juveniles is recognized, it is evident that the penological justifications for the death penalty apply to them with lesser force than to adults."); Brief of the American Medical Association et al. as Amici Curiae in Support of Respondent at 21–23, Roper v. Simmons, 543 U.S. 551 (2005) (No. 03-633); *see* Brief of the A.B.A. as Amici Curiae in Support of Petitioners at 17–20, Miller v. Alabama, 567 U.S. 460 (2012) (Nos. 10-9646 and 10-9647), 2012 WL 166269, at *17–20 [hereinafter ABA Brief, Miller v. Alabama]; Brief for the A.B.A. as Amicus Curiae Supporting Petitioners at 10–15, Graham v. Florida, 560 U.S. 48 (2010) (Nos. 08-7412 and 08-7621).

adolescents are less capable of considering the punishments and consequences associated with their actions.[19]

Further, the juvenile justice system was created in recognition of the differences between youthful and adult offenders.[20] Among accountability and public safety, the primary goal of the juvenile justice system is rehabilitation.[21] Rehabilitation is especially important for adolescents because their identities are not yet fully formed, and they are more amenable to change and rehabilitation.[22] Locking up a youthful offender for an extended period of time gives the offender little incentive to become a responsible member of society, and harsh sentencing practices are inconsistent with youths' capacity for change.[23]

Informed by these conclusions, the courts and legislature have afforded youthful offenders more protections in the criminal justice system.[24] However, an area in juvenile justice law that the courts have yet to address is the felony murder rule. Before January 2019, when S.B. 1437 took effect, if a killing occurred during the commission of a felony, each felonious participant could be charged with felony murder, regardless of the individual's role in the homicide.[25] Grounded in the transferred intent theory, the felony murder rule satisfied the mens rea malice required for murder by transferring an

19. *See Miller*, 567 U.S. at 472; *Graham*, 560 U.S. at 72.

20. Kristin Henning, *What's Wrong with Victims' Rights in Juvenile Court?: Retributive Versus Rehabilitative Systems of Justice*, 97 CAL. L. REV. 1107, 1112 (2009) ("Juvenile courts were established and continue to operate on the principle that rehabilitation is a better response to delinquency than the punishment and stigma that generally accompany an adult conviction.").

21. CAL. WELF. & INST. CODE § 202 (West 2016) (codifying that the purpose of the juvenile courts is to "provide protection and safety to the public" while providing juveniles with "protective services . . . care, treatment, and guidance consistent with their best interest" and to encourage the "rehabilitative objectives" of the code); Henning, *supra* note 20, at 1112.

22. Samantha Buckingham, *Reducing Incarceration for Youthful Offenders with a Developmental Approach to Sentencing*, 46 LOY. L.A. L. REV. 801, 847 (2013); Laurence Steinberg & Elizabeth S. Scott, *Less Guilty by the Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 AM. PSYCHOL. 1009, 1016 (2003).

23. People v. Contreras, 411 P.3d 445, 454 (Cal. 2018); *Miller*, 567 U.S. at 472–73 ("Deciding that a 'juvenile offender forever will be a danger to society' would require 'mak[ing] a judgment that [he] is incorrigible'—but 'incorrigibility is inconsistent with youth.'"). *Miller* also stated that not even rehabilitation could justify a life without parole sentence for a minor because life without parole reflects "an irrevocable judgment about [an offender's] value and place in society, 'at odds with a child's capacity for change.'" *Miller*, 567 U.S. at 473 (quoting *Graham*, 560 U.S. at 74).

24. *See infra* Part IV.

25. Emily C. Keller, *Constitutional Sentences for Juveniles Convicted of Felony Murder in the Wake of* Roper, 11 CONN. PUB. INT. L.J. 297, 302–03 (2012); *see* CAL. PENAL CODE § 189 (West 2010), *amended by* CAL. PENAL CODE § 189 (West 2019).

individual's intent to commit a felony to their intent to commit the murder that occurred during the commission of the felony.[26]

Under S.B. 1437, only those who willingly participated in the homicidal act or an act that was likely to result in homicide can be charged with felony murder.[27] While the bill positively limits the previous application of the felony murder rule, the revision still allows individuals to be convicted of first-degree murder without evidence of a "willful, deliberate, and premeditated killing," the higher mental culpability required under traditional first-degree murder.[28] Specifically, the revision allows prosecutors to charge individuals with first-degree felony murder simply by proving that the individual was a "major participant" in the underlying enumerated felony and acted with "reckless indifference to human life."[29]

This Note suggests that California should limit the felony murder rule's application against individuals under twenty-five years old so that the "reckless indifference" standard outlined in the felony murder statute does not apply to those under twenty-five years old.[30] Further,

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26. *See* Keller, *supra* note 25, at 302–03 ("The crime of felony murder does not require an intent to kill . . .").

27. In February 2018, Democratic Senator Nancy Skinner introduced S.B. 1437, which sought to narrow the felony murder rule and amend the California Penal Code. S.B. 1437, 2017–2018 Leg., Reg. Sess. (Cal. 2018). The bill was passed in the Senate on August 30, 2018, with a 27 to 10 majority and three votes unrecorded. *SB-1437 Accomplice Liability for Felony Murder*, CAL. LEGISLATIVE INFO., https://leginfo.legislature.ca.gov/faces/billVotesClient.xhtml?bill_id=201720180SB1437 (last visited Sept. 29, 2019). Governor Jerry Brown ultimately signed the bill on September 30, 2018, making the new rule effective in January 2019. Jazmine Ulloa, *California Sets New Limits on Who Can Be Charged with Felony Murder*, L.A. TIMES (Sept. 30, 2018), https://www.latimes.com/politics/la-pol-ca-felony-murder-signed-jerry-brown-20180930-story.html.

28. *See* CAL. PENAL CODE § 189 (West 2019) (codifying that outside of the felony murder context, first-degree murder requires a "kind of willful, deliberate, and premeditated killing"); People v. Chiu, 325 P.3d 972, 979 (Cal. 2018) ("First degree murder, like second degree murder, is the unlawful killing of a human being with malice aforethought, but has the additional elements of willfulness, premeditation, and deliberation, which trigger a heightened penalty."); *see also Chiu*, 325 P.3d at 985 (Kennard, J., dissenting) (arguing that an accomplice cannot be convicted of first-degree murder on an aider and abettor theory that the actual killer committed a crime that was the natural and probable consequence of a murder unless the killer's premeditation was reasonably foreseeable).

29. CAL. PENAL CODE § 189 (West 2019) (the definition of reckless indifference is to come from the definition under CAL. PENAL CODE § 190.2(d)).

30. While limiting the felony rule to individuals under eighteen may give this Note's proposition even greater force, the reckless indifference standard should not apply to any individual under age twenty-five because, as explained in Part III, the time between twelve and twenty-five years old is a period that psychologists have defined as a period of heightened development. Further, the cases that recognize juveniles' twice-diminished capacity are based on *adolescent* developmental research. *See* Steinberg & Schwartz, *supra* note 3, at 27 ("[M]ost identity

before charging an adolescent with second-degree murder under a felony murder theory, a judge should be required to analyze the defendant's culpability using the same factors listed in the California Welfare and Institutions Code section 707.

Before an adolescent can be convicted of first-degree murder, prosecutors should be required to prove the mens rea required outside the felony murder context, eliminating prosecutors' ability to piggyback off the adolescent's underlying felony charge.[31] For example, if an adolescent allegedly committed a robbery that resulted in a death, the prosecutor should be required to prove that the killing was willful, deliberate, and premeditated before the adolescent can be convicted of first-degree felony murder. A "reckless indifference" standard should not be the threshold used to convict an adolescent of first-degree murder. The conclusion that adolescents lack the ability to measure and assess risk, foresee negative consequences, and act rationally is at the very core of adolescent development research.[32] Considering these conclusions, it is illogical to apply a "reckless indifference" standard when charging an adolescent with first-degree murder.

Instead, if an adolescent (1) intended to kill but did not possess premeditation and deliberation; or (2) knew that the act was dangerous to human life and had a conscious disregard for human life, then the state could prosecute them for second-degree murder.[33] The felony

development takes place during the late teens and early twenties."); Waterman, *supra* note 3, at 355 ("The most extensive advances in identity formation occur during the time spent in college.").

31. *See* CAL. PENAL CODE § 189 (codifying that outside of the felony murder context, first-degree murder requires a "kind of willful, deliberate, and premeditated killing"); *Chiu*, 325 P.3d at 979 ("First-degree murder, like second-degree murder, is the unlawful killing of a human being with malice aforethought, but has the additional elements of willfulness, premeditation, and deliberation which trigger a heightened penalty.").

32. Brief of the American Medical Association et al. as Amici Curiae in Support of Respondent, *supra* note 18, at 12; Isabelle M. Rosso et al., *Cognitive and Emotional Components of Frontal Lobe Functioning in Childhood and Adolescence*, 1021 ANNALS N.Y. ACAD. SCI. 355, 360–61 (2004); *see* Barry C. Feld, *Competence, Culpability, and Punishment: Implications of* Atkins *for Executing and Sentencing Adolescents*, 32 HOFSTRA L. REV. 463, 515 (2003).

33. CALCRIM No. 520. If the jury finds the defendant guilty of murder, it is murder of the second-degree, unless first-degree murder is proved beyond a reasonable doubt. *Id.* Murder involves an act that caused death and a state of mind either of express or implied malice aforethought. *Id.* Express malice aforethought is found when the perpetrator unlawfully intended to kill. *Id.* Implied malice aforethought is when the perpetrator: (1) intentionally committed an act; (2) the natural and probable consequences of the act were dangerous to human life; (3) at the time of the act, the perpetrator knew the act was dangerous to human life; and (4) the defendant deliberately acted with conscious disregard for human life. *Id.*; *see Chiu*, 325 P.3d at 979 ("First degree murder, like second degree murder, is the unlawful killing of a human being with malice

murder statute is therefore unnecessary. In the alternative, if the adolescent committed a felony that is not inherently dangerous, and did not possess conscious disregard for human life, the state can pursue involuntary manslaughter charges.[34]

In implementing such a change, California should extend the same rationale used in recent United States Supreme Court decisions and California law reforms: the neurological and psychological development that occurs during adolescence makes adolescents less capable of avoiding a mental state of reckless indifference and, ultimately, makes them less culpable than adults.

Part II of this Note outlines the history of the felony murder rule and explains the rule's rationales. The rule's rationales focus on retribution and deterrence, which not only fail in the felony murder context but also provide zero justification in cases involving youthful offenders. Part III outlines what is known about adolescent psychological development and neuroscience and its correlation to the cognitive and psychological abilities essential to decision-making and rational thinking. Part IV provides an overview of the recent federal and California laws advancing juvenile justice reform. Part V explains why scientific research, the goals of the juvenile justice system, and recent advancements in juvenile justice reform support a felony murder rule that excludes adolescents.

Finally, Part VI proposes a new felony murder rule. This new rule will exclude adolescents from the third mental culpability standard

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aforethought, but has the additional elements of willfulness, premeditation, and deliberation, which trigger a heightened penalty."); *see also* CALJIC No. 8.30 ("Murder of the second degree is [also] the unlawful killing of a human being with malice aforethought when the perpetrator intended unlawfully to kill a human being *but the evidence is insufficient to prove deliberation and premeditation*." (emphasis added)).

34. CALCRIM No. 581. A person commits involuntary manslaughter if the defendant's criminal negligence caused the death of another. *Id.* A defendant acts with criminal negligence when they act in a reckless way that creates a high risk of death or great bodily injury and a reasonable person would have known that acting in that way would create such a risk. In contrast to murder, the defendant does not possess a *conscious* disregard to human life. *Id.* The definition for an "inherently dangerous" felony is vague. *See* Henry v. Spearman, 899 F.3d 703, 707–08 (9th Cir. 2018). California courts define inherently dangerous by looking to "the elements of the felony in the abstract, not the particular facts" of the defendant's conduct. People v. Chun, 203 P.3d 425, 434 (Cal. 2009). The California Supreme Court has asked whether, "by its very nature, [the crime] cannot be committed without creating" an undue risk to human life. People v. Burroughs, 678 P.2d 894, 900 (Cal. 1984). At other times it has considered the ordinary commission of a crime, "even if, at the time of the [offense]," there was no innate risk at all. People v. Hansen, 885 P.2d 1022, 1027 (Cal. 1994), *overruled on other grounds by Chun*, 203 P.3d at 435. However, the California Supreme Court has stated that a felony that "can be committed without endangering human life" is not inherently dangerous. People v. Howard, 104 P.3d 107, 112 (Cal. 2005).

sufficient to find felony murder: "the person was a major participant in the underlying felony and acted with reckless indifference to human life."[35] Further, before charging an adolescent with second-degree murder under a felony murder theory, a judge should be required to analyze the defendant's culpability using the same factors listed in the California Welfare and Institutions Code section 707. These changes will force the state to find alternative means to charge an adolescent with murder. Youthful offenders are less culpable than adult offenders. Therefore, to charge an adolescent with first-degree murder, prosecutors should be required to prove an accurate mens rea of premeditation and deliberation rather than "reckless indifference," and at least an intent to kill, when an adolescent participates in a felony that results in a death.

II. THE HISTORY OF THE FELONY MURDER RULE

A. The Felony Murder Rule and Its Origins

Generally, to prove a crime, the prosecution must prove that there was an actus reas and mens rea.[36] The actus reas is the physical, voluntary criminal act itself, and the mens rea is the culpable mental state required under the statute.[37] Although most crimes have a mens rea requirement, some acts that are deemed so harmful to the public are considered crimes solely because of the actus reas.[38] These are called strict liability crimes.[39]

Traditionally, felony murder is a type of strict liability crime.[40] If a person is killed during the course of a felony, to satisfy the requisite intent for murder, the felony murder rule transfers the felonious actor's malicious intent to commit the felony to their intent to commit the murder.[41] This ultimately charges individuals for unintentional killings based on their intent to commit a felony.

35. CAL. PENAL CODE § 189.

36. LAURIE L. LEVENSON & ALEX RICCIARDULLI, CALIFORNIA CRIMINAL LAW § 2:2 (2018–2019 ed.).

37. *Id.* In some cases, the actus reas can be an omission that amounts to a crime. *Id.*

38. *Id.*

39. *Id.*

40. Alison Burton, Note, *A Commonsense Conclusion: Creating a Juvenile Carve Out to the Massachusetts Felony Murder Rule*, 52 HARV. C.R.-C.L. L. REV. 169, 171 (2017) ("The felony murder rule is a form of strict liability.").

41. *Id.*

While the concept of the felony murder rule is widely understood amongst lawyers, there are two working theories regarding the rule's origins: the traditional and contemporary views.[42] Traditional commentators believe that the rule was first established in English common law to attribute malice to a felon for their co-felon's murderous act, thus, creating a strict liability crime.[43]

Contemporary legal scholars suggest that felony murder developed based on a seventeenth century English judge's definition of an "unlawful act killing" that was subsequently misinterpreted and incorrectly applied to multiple cases in the late nineteenth century.[44] The modern felony rule then made its way to the United States after William Blackstone incorporated the misinterpreted rule in his *Commentaries on the Law of England*, which became American lawyers' reference for common law principals.[45]

England's doctrine was much more limited than the United States' later-adopted, broad-sweeping felony murder doctrine.[46] The English doctrine required an affirmative act of violence, inherently dangerous to human life, in the commission or attempt of a felony.[47] England's felony murder rule added little to their existing laws attributing intent to kill unintended victims to those who had intent to commit the violent act, and the rule never held felons strictly liable for accidental deaths.[48] As a result, contemporary theorists believe that the true first felony murder rules did not start in medieval England but in nineteenth-century America.[49] Still, England recognized the felony murder rule's injustice and limited usefulness, and abolished it in 1957.[50]

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42. Sterling Root, Senior Thesis, *Juvenile Culpability and the Felony Murder Rule: Applying the* Enmund *Standard to Juveniles Facing Felony Murder Charges*, TRINITY COLL. DIG. REPOSITORY 12 (2016), https://digitalrepository.trincoll.edu/cgi/viewcontent.cgi?article=1579&context=theses.

43. Nelson E. Roth & Scott E. Sundby, *The Felony-Murder Rule: A Doctrine at Constitutional Crossroads*, 70 CORNELL L. REV. 446, 449 (1985).

44. Guyora Binder, *The Origins of American Felony Murder Rules*, 57 STAN. L. REV. 59, 83–84, 102–03 (2004).

45. *Id.* at 95.

46. *Id.* at 64.

47. *Id.*

48. *Id.*

49. *Id.*

50. *Id.* at 107.

In the United States, the early felony murder rule required intent to inflict an injury during the felony.[51] However, by the 1820s, states enacted broader felony murder statutes that imposed liability for any killing, even unintentional killings, that occurred during the commission of a felony.[52]

B. California's Felony Murder Statute

California's first felony murder rule was adopted in 1850 and afforded murder liability for involuntary killings that occurred "in the perpetration of any felony, when the circumstances showed an 'abandoned and malignant heart.'"[53] In 1856, California specifically created first-degree felony murder, which involved murders that occurred in the course of enumerated dangerous felonies.[54]

In California's first actual felony murder case in 1865, *People v. Pool*,[55] two stagecoach robbers were convicted of murder after one intentionally killed an arresting officer.[56] The other robber who did not shoot the officer was also charged with murder because the defendants conspired to rob and kill *anyone*, if necessary, so *any* death that resulted in furtherance of that plan made each liable for murder.[57]

In the late nineteenth century, three California Supreme Court cases suggested an even broader rule, which set the tone for the modern California felony murder rule.[58] To satisfy the mens rea element required for murder, the intent to commit the inherently dangerous felony was transferred to, or merged to become, the intent to commit the murder.[59] The *People v. Olsen*[60] court rejected the argument that felony murder only covered a co-felon's killing if it was

51. *Id.* at 65–66.

52. *Id.* at 65.

53. *Id.* at 121. Abandoned and malignant heart murder requires "an act of violence, and reckless disregard of a danger of death." *Id.* at 185.

54. *See id.* at 167.

55. 27 Cal. 572 (1865).

56. Binder, *supra* note 44, at 165.

57. *Id.* The conviction was predicated on the felons' conspiracy, but later cases broadened the felony murder rule. *Id.*

58. *See* People v. Doyell, 48 Cal. 85 (1874); *see also* People v. Olsen, 22 P. 125 (Cal. 1889) (utilizing the transferred intent theory); People v. Vasquez, 49 Cal. 560, 563 (1875) ("If the homicide in question was committed by one of his associates engaged in the robbery, in furtherance of their common purpose to rob, he is as accountable as though his own hand had intentionally given the fatal blow . . . .").

59. Binder, *supra* note 44, at 165–66.

60. 22 P. 125 (Cal. 1889).

the "ordinary and probable effect of the wrongful act especially agreed on," and consequently charged unintentional killings as murder.[61] *Olsen* also confirmed that felonies not enumerated in the felony murder statute could support a second-degree felony murder charge, which exists in California's Penal Code today.[62]

Prior to the recent addition to the rule under S.B. 1437, California's felony murder rule was only detailed in one section of the California Penal Code:

> (a) All murder which . . . *is committed in the perpetration of, or attempt to perpetrate, arson, rape, carjacking, robbery, burglary, mayhem, kidnapping, train wrecking*, or any act punishable . . . or any murder which is perpetrated by means of discharging a firearm from a motor vehicle, intentionally at another person outside of the vehicle with the intent to inflict death, is murder of the first-degree.[63]

The felony murder rule did not require premeditation or malice aforethought normally required under a first-degree murder charge.[64] Instead, the perpetrator only needed the specific intent to commit one of the felonies enumerated in the statute.[65] Once this intent to commit the felony was found, there was no requirement that the perpetrator have a specific mental culpability to commit the killing itself.[66]

The new California felony murder rule under S.B. 1437 includes the same language stated above, under California Penal Code section 189(a). However, an additional section was added that reads:

> (e) A participant in the perpetration or attempted perpetration of a felony listed in subdivision (a) in which a

61. *Olsen*, 22 P. at 126; *see* CAL. PENAL CODE § 189(a) (West 2019).

62. CAL. PENAL CODE § 189(b). "All other kinds of murders are of the second degree." People v. Patterson, 778 P.2d 549, 553 (Cal. 1989) (describing a homicide that is a direct result of an inherently dangerous felony that is not enumerated in California Penal Code section 189(a), as "at least second-degree murder").

63. CAL. PENAL CODE § 189 (West 2014) (prior to S.B. 1437, 2017–2018 Leg., Reg. Sess. (Cal. 2018)).

64. People v. Chiu, 325 P.3d 972, 979 (Cal. 2018) ("First degree murder, like second degree murder, is the unlawful killing of a human being with malice aforethought, but has the additional elements of willfulness, premeditation, and deliberation which trigger a heightened penalty."). In *Chiu*, the court declined to extend a first-degree murder charge for participating in a crime that naturally, probably, and foreseeably would result in a murder. *Id.* The court reasoned that first-degree murder is understood to include a heightened culpability. *Id.*

65. *See* CAL. PENAL CODE § 189 (West 2019); People v. Chun, 203 P.3d 425, 430 (Cal. 2009).

66. *Chun*, 203 P.3d at 430; People v. Washington, 402 P.2d 130, 136 (Cal. 1965) (stating that "even if the killing be accidental or unintentional, if committed in the attempt to perpetrate one of the felonies named in section 189 it is first degree murder").

> death occurs is liable for murder only if one of the following is proven:
>
> (1) The person was the actual killer.
>
> (2) The person was not the actual killer, but, with the intent to kill, aided, abetted, counseled, commanded, induced, solicited, requested, or assisted the actual killer in the commission of murder in the first degree.[67]
>
> (3) The person was a major participant in the underlying felony and acted with reckless indifference to human life, as described in subdivision (d) of Section 190.2.[68]

Instead of allowing any accidental killing to be a murder if a death occurs during the commission of a felony, California Penal Code section 189(e) outlines more specific circumstances required for felony murder culpability. A defendant is only liable for felony murder if they were the actual killer, intended to kill and aided and abetted the actual killer, or, as this Note focuses on, was a major participant in the felony and acted with *reckless indifference* to human life.[69] *Still, the degree of the murder, either first or second, depends on the type of felony committed, and not the varying mental culpability of the perpetrator.*[70] Therefore, under section 189(e)(3), an individual can still be charged with first-degree murder, a conviction that comes with twenty-five years to life, without even a showing of intent to kill.[71]

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67. CAL. PENAL CODE § 189(e)(1), (2). Section 189(e)(1) describes an actual killer with an unknown intent. Does this merely describe the trigger person regardless of intent? Section 189(e)(2) describes an individual with intent to kill but without premeditation or deliberation. However, it fails to describe what type of first-degree murder the individual aided. While these sections are not the topic of this Note, these standards also leave room to disproportionately affect adolescents because they allow an individual to be convicted of first-degree murder based on a lower standard of mental culpability than typically required for first-degree murder. It still does not address that adolescents may not foresee that engaging in a felony can result in murder.

68. S.B. 1437, 2017–2018 Leg., Reg. Sess. (Cal. 2018).

69. CAL. PENAL CODE § 189(e) (West 2019).

70. *Id.* § 189(a). "All other kinds of murders are in the second degree." California Penal Code section 189(a) states the specific felonies that will make an individual liable for first-degree murder. People v. Patterson, 778 P.2d 549, 553 (Cal. 1989) (describing a homicide that is a direct result of an inherently dangerous felony that is not enumerated in California Penal Code section 189(a), as "at least second degree murder").

71. *See* CAL. PENAL CODE § 189. If an individual committed a felony enumerated in section 189(a), was a major participant in the felony, and acted with a "reckless indifference" to human life, they can be charged with first-degree felony murder. CAL. PENAL CODE § 190(a) (West 2014) ("Every person guilty of murder in the first degree shall be punished by death, imprisonment in the state prison for life without the possibility of parole, or imprisonment in the state prison for a term of 25 years to life."); *see* People v. Chiu, 325 P.3d 972, 979 (Cal. 2018) ("First degree murder, like second degree murder, is the unlawful killing of a human being with malice aforethought, but has

> Further, California Penal Code section 188 previously stated:
> [Malice] may be express or implied. It is express "when there is manifested a deliberate intention unlawfully to take away the life of a fellow creature." It is implied "when no considerable provocation appears, or when the circumstances attending the killing show an abandoned and malignant heart."[72]
> *When it is shown that the killing resulted from the intentional doing of an act with express or implied malice as defined above, no other mental state need be shown to establish the mental state of malice aforethought.*[73]

S.B. 1437 clarifies section 188 by changing the fourth sentence to read: "Except as stated in subdivision (e) of Section 189, in order to be convicted of murder, a principal in a crime shall act with malice aforethought. Malice shall not be imputed to a person based solely on his or her participation in a crime."[74] This prohibits an individual from being convicted of murder simply by implying malice from their participation in a felony, which had been an unfortunate consequence of the previous felony murder rule.[75] However, the statute still allows an individual to be charged with murder without proving the specific elements required under malice aforethought.[76] As long as one of the requirements described in subdivisions 189(e)(1)–(3) is proven, and the individual intentionally committed an inherently dangerous felony, an individual can be charged with murder.[77] This ultimately sets a lower standard to prove murder, even in the second degree.

The amendments to the law are retroactive, meaning that those who were previously convicted of felony murder can file a petition to have their felony murder sentences vacated and their charges

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the additional elements of willfulness, premeditation, and deliberation which trigger a heightened penalty.").

72. People v. Chun, 203 P.3d 425, 429 (Cal. 2009) (quoting CAL. PENAL CODE § 188). A person with an "abandoned and malignant heart" lacks a deliberate and premeditated intent to kill, but instead deliberately acts with a conscious disregard for human life by knowing that the conduct endangers life. People v. Phillips, 414 P.2d 353, 361 (Cal. 1996); Binder, *supra* note 44, at 185 (describing abandoned and malignant heart as a reckless disregard of a danger of death).

73. CAL. PENAL CODE § 188 (West 2014) (amended 2019) (emphasis added).

74. CAL. PENAL CODE § 188(a)(3) (West 2019).

75. Binder, *supra* note 44, at 165–66.

76. CAL. PENAL CODE § 188(a)(3) ("Except as stated in subdivision (e) of Section 189, in order to be convicted of murder, a principal in a crime shall act with malice aforethought"); *see* CALCRIM No. 520 (explaining malice aforethought).

77. *See* CAL. PENAL CODE § 189(e).

resentenced on any remaining counts.[78] Moreover, those entitled to relief under the new law will be given credit for the time that they have already served.[79]

The new law moves closer toward allocating proportional responsibility by narrowing the application of the felony murder rule to those who are most commonly believed to be responsible for a killing.[80] Nevertheless, the rule does not go far enough to protect adolescents. The rule's "reckless indifference" standard still leaves room for the state to charge adolescents with first-degree murder, the highest degree of murder, without evidence that the adolescent possessed the highest form of mental culpability. A "reckless indifference" standard does not involve a deliberate attempt to kill, premeditation, or deliberation.[81] It describes conduct that a person should know endangers human life.[82] However, as described in Part III, adolescents have a weakened ability to appreciate the risks and dangerous consequences of their actions.[83] Therefore, as it stands today, California's felony murder rule condones unjustly punishing adolescents for murder because of their developmental limitations.[84]

78. CAL. PENAL CODE § 1170.95.

79. *Id.* For example, if an individual was convicted of felony murder for a robbery and their participation in the murder does not rise to the standard outlined in the revised section 189 statute, then the felony murder conviction will be vacated and the individual will be sentenced for the robbery. The individual will be given credit for time served and can therefore be released if they have already served the amount of time that was newly calculated. While the issue of retroactivity is not the focus of this Note, opponents of the new statute say that it will be difficult to determine which individuals were convicted under a theory of felony murder, leading to unmanageable volumes of petitions. Robert Brown et al., *The Death of Felony Murder?: CDAA Webinar on SB 1437*, CAL. DIST. ATT'Y ASS'N (Nov. 1, 2018), https://www.cdaa.org/wp-content/uploads/Death-of-Felony-Murder.pdf.

80. CAL. PENAL CODE § 189(e). The statute charges those who (1) were the actual killer; (2) intended to kill, or aided the actual killer; or (3) were a "major participant" who acted with reckless indifference to human life during the underlying felony offense. *Id.*

81. *See* Tison v. Arizona, 481 U.S. 137, 157–58 (1987) (describing reckless indifference as "knowingly engaging in criminal activities known to carry a grave risk of death").

82. *Id.*

83. *See* Levick et al., *supra* note 16, at 294.

84. As discussed in Part V, the rule's effects result in sentencing minors to longer sentences because they can be charged with first-degree or second-degree murder, instead of being charged with the felony they committed. Further, the felony murder rule results in more transfers of minors from juvenile to adult court, where they will likely receive longer and harsher sentences. *See* Erin H. Flynn, Comment, *Dismantling the Felony-Murder Rule: Juvenile Deterrence and Retribution Post*-Roper v. Simmons, 156 U. PA. L. REV. 1049, 1060 (2008).

C. "Major Participant" and "Reckless Indifference" Defined

The "major participant" and "reckless indifference to human life" requirements under the new felony murder rule are the same standards used in California Penal Code section 190.2(d) to determine whether a defendant committed a special circumstances murder and is eligible for the death penalty.[85] Therefore, California courts will look toward special circumstances murder cases to determine the standard under the new felony murder rule.[86]

The Court in *Tison v. Arizona*[87] stated that the "major participant" and "reckless indifference" "requirements significantly overlap" because "the greater the defendant's participation in the felony murder, the more likely that he acted with reckless indifference to human life."[88] Therefore, it is imperative to discuss how California courts analyze both requirements.

1. Major Participant

In *People v. Proby*,[89] the court found that a "major participant" is "'notable or conspicuous in effect or scope' and is 'one of the larger or more important members or units of a kind or group.'"[90] In the more recent case, *People v. Banks*,[91] the defendant was a getaway driver for an armed robbery in which one of the co-defendants shot and killed a security guard.[92] The *Banks* court agreed with the *Proby* court's definition of major participant but found that the jury must also weigh the following factors before making a "major participant" determination:

85. CAL. PENAL CODE § 189(e)(3) ("The person was a major participant in the underlying felony and acted with reckless indifference to human life, as described in subdivision (d) of Section 190.2."); *id.* § 190.2(d) ("[E]very person, not the actual killer, who, with reckless indifference to human life and as a major participant, aids, abets, counsels, commands, induces, solicits, requests, or assists in the commission of a felony enumerated in section 190.2 (a)(17) which results in the death of some person or persons, and who is found guilty of murder in the *first-degree* therefore, shall be punished by death or imprisonment in the state prison for life without the possibility of parole if a special circumstance enumerated in paragraph (17) of subdivision (a) has been found to be true under Section 190.4."); S.B. 1437 2017–2018 Leg., Reg. Sess. (Cal. 2018).

86. *See* CAL. PENAL CODE § 189(e)(3).

87. 481 U.S. 137 (1987).

88. *Id.* at 153.

89. 70 Cal. Rptr. 2d 706 (Ct. App. 1998) (quoting WEBSTER'S NEW INTERNATIONAL DICTIONARY 1363 (3d ed. 1971)).

90. *Id.* at 711.

91. 351 P.3d 330 (Cal. 2015).

92. *Id.* at 333.

> What role did the defendant have in planning the criminal enterprise that led to one or more deaths? What role did the defendant have in supplying or using lethal weapons? What awareness did the defendant have of particular dangers posed by the nature of the crime, weapons used, or past experience or conduct of the other participants? Was the defendant present at the scene of the killing, in a position to facilitate or prevent the actual murder, and did his or her own actions or inaction play a particular role in the death? What did the defendant do after lethal force was used?[93]

In assessing a defendant's degree of participation, the *Banks* court suggested that juries consider the differing levels of culpability between the defendants in *Tison v. Arizona* and *Enmund v. Florida*,[94] and that no single factor is necessary or sufficient.[95]

In *Enmund v. Florida*, two people attempted to rob Thomas Kersey.[96] However, after Kersey's wife brought out a gun during the attempted robbery, the two people killed Kersey and his wife.[97] Enmund was outside the Kersey's home at the time of the incident, allegedly waiting to help his two co-defendants escape after the crime.[98] The jury found Enmund guilty of two counts of first-degree murder and one count of robbery, and Enmund was sentenced to the death penalty.[99] However, the Supreme Court overturned Enmund's original death sentence, finding that it violated the Eighth and Fourteenth Amendments.[100] Because Enmund "did not commit the homicide, was not present when the killing took place, and did not participate in a plot or scheme to murder," his culpability did not rise to the level of culpability to warrant the death penalty.[101] The Court held that a felony murder aider and abettor "who does not . . . kill, attempt to kill, or intend that a killing take place or that lethal force will be employed" cannot receive the death penalty.[102]

93. *Id.* at 338–39.
94. 458 U.S. 782 (1982).
95. *Banks*, 351 P.3d at 337–39.
96. *Enmund*, 458 U.S. at 784.
97. *Id.*
98. *Id.* at 786.
99. *Id.* at 785.
100. *Id.* at 788.
101. *Id.* at 795, 798.
102. *Id.* at 797.

In *Tison v. Arizona*, Ricky, Raymond, and Donald Tison facilitated their father's and his cellmate's armed breakout, in which the two prisoners held guards and visitors of the prison at gunpoint.[103] After they left the prison, their car got a flat tire, and Raymond waved down a family of four to help them.[104] When the family stopped, the others emerged and held the family at gunpoint.[105] Raymond and Donald drove the family into the desert, with the others following behind.[106] The Tison brothers' father and his cellmate then murdered the family, while the brothers did nothing to stop it.[107] The United States Supreme Court agreed that the surviving brothers, Ricky and Raymond, fell outside the "intent to kill" standard as defined in *Enmund*.[108] However, the Court held that even if a defendant does not possess the intent to kill, if they instead are a major participant in the underlying felony and possessed reckless indifference to human life, they can still satisfy the culpability requirement for capital punishment.[109] The Court remanded the case to determine whether the brothers fell into that category.[110]

In *Banks*, the court ultimately overturned the defendant's death penalty sentence.[111] It found that the defendant's role as the getaway driver put his participation on the *Enmund* end of the "Tison-Enmund spectrum."[112] Like Enmund, the defendant was not at the scene when the victim was killed, played a minor role in planning the robbery, did not instigate the killing, and could not have prevented the killing. Further, without more, participation in an armed robbery does not involve "engaging in criminal activities known to carry a grave risk of death."[113] Therefore, the defendant did not qualify as a major participant.

103. Tison v. Arizona, 481 U.S. 137, 139 (1987).
104. *Id.* at 139–40.
105. *Id.* at 140.
106. *Id.*
107. *Id.* at 141.
108. *Id.* at 144.
109. *Id.* at 158.
110. *Id.*
111. People v. Banks, 352 P.3d 330, 345 (Cal. 2015).
112. *Id.* at 340.
113. *Id.*

2. Reckless Indifference

The *Tison* Court described reckless indifference as "knowingly engaging in criminal activities known to carry a grave risk of death" or "anticipat[ing] that lethal force would or might be used in accomplishing the underlying felony."[114] The California Supreme Court has stated that recklessness encompasses a subjective and objective element.[115] "The subjective element is the defendant's conscious disregard of risks known to him or her."[116] The objective element requires the jury to determine whether the actor's disregard of the risk, considering their perceptions, "involved a gross deviation from the standard of conduct that a law-abiding person in the actor's situation would observe."[117]

> The *Tison* Court listed examples of reckless indifference, such as:
>
> [T]he person who tortures another not caring whether the victim lives or dies, or the robber who shoots someone in the course of the robbery, utterly indifferent to the fact that the desire to rob may have the unintended consequence of killing the victim as well as taking the victim's property.[118]

These examples involve a defendant who personally killed a victim, instead of a defendant who was not the actual killer, a gray area that is relevant in the context of felony murder.[119]

The *People v. Clark*[120] court later applied *Tison*'s definition to a case that fell within the gray area.[121] To determine whether the defendant exhibited "reckless indifference to human life," the *Clark* court considered the specific facts of the case "in light of some of the case-specific factors that this court and other state appellate courts" used.[122] The factors included:

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114. *Tison*, 481 U.S. at 150–51, 157.

115. People v. Clark, 372 P.3d 811, 886–87 (Cal. 2018).

116. *Id.* at 883.

117. *Id.* As described below, the United States Supreme Court held that an individual's age informs the *Miranda* analysis when deciding whether a reasonable person would believe that they were free to terminate a police interrogation. J.D.B. v. North Carolina, 564 U.S. 261, 271–72 (2011). Similarly, in determining whether conduct amounts to reckless indifference, involving "a gross deviation from the standard of conduct that a law-abiding person in the actor's situation would observe," the individual's age should be considered. *Id.*

118. *Tison*, 481 U.S. at 157.

119. *Clark*, 372 P.3d at 883.

120. 372 P.3d 811 (Cal. 2018).

121. *Id.* at 884.

122. *Id.*

> (1) knowledge of weapons and use and number of weapons, (2) physical presence at the crime and opportunities to restrain the crime and/or aid the victim, (3) duration of the felony, (4) defendant's knowledge of cohort's likelihood of killing, and (5) defendant's efforts to minimize the risks of the violence during the felony.[123]

Again, no single factor is necessary or sufficient.[124]

In *Clark*, defendant Clark was charged with two first-degree murders arising from a burglary and attempted robbery of a computer store.[125] To charge Clark with two murders, prosecutors alleged that Clark surveilled the computer store in preparation of the robbery, was the head orchestrator of the plan, was seen departing from the store after a woman was murdered, and conspired to have his co-defendant murdered for testifying against Clark to a grand jury.[126]

In finding that Clark did not possess reckless indifference to human life, the court found that though Clark planned the robbery, had knowledge that a gun would be used during the robbery, and may have hastily departed from the crime scene, there was a short period of interaction between the perpetrators and the victim, Clark likely did not know that his co-defendant would kill, and Clark planned the robbery with an attempt to minimize risk of violence.[127] The court ultimately determined that "reckless indifference" likely encompasses a willingness to kill or assist in a killing, "even if the defendant does not specifically desire . . . death as the outcome of his actions."[128]

In an attempt to name situations that satisfy the "reckless indifference" standard, the California and United States Supreme Courts have found that the fact that a robbery involves a gun is insufficient to support a finding of reckless indifference to human life but that "the manufacture and planting of a live bomb" could possibly suffice.[129] Though courts attempt to establish guidelines, acts that do

123. *Id.* at 884–87.
124. *Id.* at 884.
125. *Id.* at 828.
126. *Id.* at 829–34.
127. *Id.* at 884–88.
128. *Id.* at 883.
129. *Id.* at 882; People v. Banks, 351 P.3d 330, 344 n.9 (Cal. 2015).

or do not exhibit reckless indifference are difficult to distinguish and are case specific.[130]

The "major participant" and "reckless indifference" analysis inherently include a foreseeability and awareness component.[131] However, science has shown, and the courts have found, that adolescents cannot effectively anticipate risks or foresee the consequences of their actions, making the bill's standard illogical when applied to adolescents up to twenty-five years old.[132] Further, as outlined below, the felony murder rule's only justifications lack merit and further support the idea that this standard should not apply to adolescents.

III. ADOLESCENT BRAIN DEVELOPMENT

Developmental psychology and neuroscience research continues to shed light on the developmental differences between adolescents and adults.[133] Neuroscience established that certain brain regions that control adolescents' thoughts, actions, and emotions continue to mature during a temporary stage of development that lasts until early adulthood.[134] Due to their brain's underdeveloped structure and function, adolescents lack the capacity for mature, independent judgments, predicting future consequences, and engaging in the cost-benefit analysis needed to make rational decisions.[135] Further, based on psychological assessment, adolescents are more vulnerable to peer pressure, trauma, and negative external influences, which influence

130. *Banks*, 351 P.3d at 338 (stating that the jury must consider the totality of the circumstances and the specific facts of the case).

131. Tison v. Arizona, 481 U.S. 137, 144, 157 (1987) (describing reckless indifference as "engaging in criminal activities known to carry a grave risk of death" or "anticipat[ing] that lethal force would or might be used"); *Clark*, 372 P.3d at 886 (using "defendant's knowledge of cohort's likelihood of killing" as a factor to determine reckless indifference); *Banks*, 351 P.3d at 338–39 ("What awareness did the defendant have of particular dangers posed by the nature of the crime, weapons used, or past experience or conduct of the other participants?").

132. Steinberg & Schwartz, *supra* note 3, at 27; APA Brief, *supra* note 16, at 3–4.

133. There are differences in brain maturation and cognitive abilities within the adolescent age group. However, in this Note, the term "adolescence" encompasses individuals from age twelve to twenty-five. *See* APA Brief, *supra* note 16, at 7–15; *see, e.g.*, Steinberg & Schwartz, *supra* note 3, at 27 ("[M]ost identity development takes place during the late teens and early twenties."); Waterman, *supra* note 3, at 355 ("The most extensive advances in identity formation occur during the time spent in college.").

134. *See* AMA Brief, *supra* note 16, at 3; *see, e.g.*, Abigail A. Baird et al., *Functional Magnetic Resonance Imaging of Facial Affect Recognition in Children and Adolescents*, 38 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 195, 197 (1999).

135. *See* APA Brief, *supra* note 16, at 3–4; *see also* Roper v. Simmons, 543 U.S. 551, 569–70 (2005).

their decision-making skills.[136] As informed by research, and acknowledged in the courts, youthful offenders are less culpable than adult offenders.[137] Thus, a youthful offender's culpability for murder should not be based on their alleged reckless decision to engage in a felony, and the "reckless indifference" standard under the amended felony murder statute should not apply to adolescents.

A. Neuroscience: Structural and Functional Brain Development

1. The Prefrontal Cortex and the Amygdala

Impulsivity is defined as the predisposition to rapidly override and discount goal-directing responses for inappropriate and/or more compelling thoughts and actions without regard for their negative consequences.[138] Impulsivity includes minimal to zero decision-making processes or forethought, aspects that are essential to decision-making and culpability.[139]

Psychological research indicates that impulse control and self-management develops throughout childhood and early adulthood and that "expecting the experience-based ability to resist impulses . . . to be fully formed prior to age eighteen or nineteen would seem on present evidence to be wishful thinking."[140] This is because the prefrontal cortex is one of the last brain regions to mature, and the frontal lobes continue to develop until the mid-twenties.[141] The prefrontal cortex controls planning, decision-making, risk assessment, voluntary behavior control, evaluation of reward and punishment,

136. *See Roper*, 543 U.S. at 569–70; NATIONAL RESEARCH COUNCIL, REFORMING JUVENILE JUSTICE: A DEVELOPMENTAL APPROACH 2–11 (Richard J. Bonnie et al. eds., 2013); Lucy C. Ferguson, *The Implications of Developmental Cognitive Research on "Evolving Standards of Decency" and the Imposition of the Death Penalty on Juveniles*, 54 AM. U. L. REV. 441, 458 (2004); ("Current empirical evidence from the behavioral sciences suggests that adolescents differ from adults and children in three important ways that lead to differences in behavior."); AMA Brief, *supra* note 16, at 6–7; APA Brief, *supra* note 16, at 8–9.

137. *See infra* Sections III(A)–(C); *see also Roper*, 543 U.S. at 569–70.

138. Levick et al., *supra* note 16, at 294; *see* AMA Brief, *supra* note 16, at 10; *see, e.g.*, Beatriz Luna, *The Maturation of Cognitive Control and the Adolescent Brain*, *in* FROM ATTENTION TO GOAL-DIRECTED BEHAVIOR, 249, 250, 251 (F. Aboitiz & D. Cosmelli eds., 2009).

139. Levick et al., *supra* note 16, at 295.

140. APA Brief, *supra* note 16, at 10 (quoting Franklin E. Zimring, *Penal Proportionality for the Young Offender: Notes on Immaturity, Capacity, and Diminished Responsibility*, *in* YOUTH ON TRIAL: A DEVELOPMENTAL PERSPECTIVE ON JUVENILE JUSTICE 271, 280, 282 (Thomas Grisso & Robert G. Schwartz eds., 2000)); *see* Laurence Steinberg, *A Dual Systems Model of Adolescent Risk-Taking*, 52 DEVELOPMENTAL PSYCHOBIOLOGY 216, 217 (2010).

141. B.J Casey et al., *The Adolescent Brain,* 28 DEVELOPMENTAL REV. 62, 63–64 (2008); Buckingham, *supra* note 22, at 841; Steinberg, *supra* note 139, at 216.

impulse control, responses to criticism and affirmation, moral reasoning, and emotional regulation.[142] Therefore, the prefrontal cortex's large role in an individual's decision-making process, in combination with its late development, hinders adolescents' rational decision-making skills and causes them to act more impulsively than adults.[143]

Further, the motivational system, which includes the amygdala, controls risky and reward-seeking behavior and develops more rapidly than the prefrontal cortex's cognitive control system, which works to regulate behavior.[144] Therefore, before the prefrontal cortex is fully developed, adolescents primarily rely on the amygdala when making decisions.[145]

The amygdala is associated with emotional impulsivity and aggressive behavior.[146] It is a "neural system" that identifies danger and creates emotional responses to that danger quickly and reflexively.[147] Reliance on the amygdala and motivational system correlates with the adolescent's impulsivity, attraction to immediate rewards compared to long-term rewards, and weak ability to anticipate a decision's consequences.[148]

Controlling one's impulses is essential to cognitive development, effective problem solving, and exercising good judgment.[149]

142. MICHAEL S. GAZZANIGA ET AL., COGNITIVE NEUROSCIENCE: THE BIOLOGY OF THE MIND 75 (2d ed. 2002) (describing the function of the frontal lobe of the brain); Antoine Bechara et al., *Characterization of the Decision-Making Deficit of Patients with Ventromedial Prefrontal Cortex Lesions*, 123 BRAIN 2189, 2198 (2000); Jorge Moll et al., *Frontopolar and Anterior Temporal Cortex Activation in a Moral Judgment Task: Preliminary Functional MRI Results in Normal Subjects*, 59 ARQ NEUROPSIQUIATR 657, 661 (2001) (discussing a study showing that moral judgments are made using the frontopolar cortex of the brain); Robert D. Rogers et al., *Choosing Between Small, Likely Rewards and Large, Unlikely Rewards Activates Inferior and Orbital Prefrontal Cortex,* 20 J. NEUROSCIENCE 9029, 9029 (1999) (concluding that studies show the orbital prefrontal cortex is linked to decision-making and risk-reward comprehension); AMA Brief, *supra* note 16, at 17–19; *see* B.J. Casey et al., *Structural and Functional Brain Development and Its Relation to Cognitive Development*, 54 BIOLOGICAL PSYCHOL. 241, 244 (2000).

143. *See* AMA Brief, *supra* note 16, at 17–18; Buckingham, *supra* note 22, at 839–40; Flynn, *supra* note 84, at 1070.

144. AMA Brief, *supra* note 16, at 29–30.

145. *See id.*; *see also* GAZZANIGA ET AL., *supra* note 142, at 553–73 (describing the amygdala and its connection to learned emotional responses).

146. AMA Brief, *supra* note 16, at 30.

147. *See id.* at 31; ELKHONON GOLDBERG, THE EXECUTIVE BRAIN: FRONTAL LOBES & THE CIVILIZED MIND 31 (2001) (describing the function of the amygdala and its "fight or flight" reaction).

148. *See* Feld, *supra* note 32, at 519–20.

149. AMA Brief, *supra* note 16, at 10; *see* Luna, *supra* note 138, at 250, 251.

Consequently, adolescents' diminished capability to reflect before they act, assess dangers, and foresee consequences distinguishes adult and adolescent culpability.[150]

Similar to adolescents' limited ability to control their impulses, adolescents struggle to regulate their emotional responses.[151] Individuals typically control their emotional responses to stimuli based on their behavioral goals.[152] However, due to an overactive amygdala and an underdeveloped prefrontal cortex, the ability to regulate emotions develops throughout childhood and early adulthood, affecting adolescents' ability to voluntarily, maturely, and effectively control their behavior and envision their goals.[153]

As a result, adolescents' heightened emotional responses limit their ability to make informed decisions, causing them to more likely engage in risky, impulsive, and irrational behavior without weighing the negative consequences of their actions.[154]

2. Myelination

Myelination occurs during adolescence, which affects brain maturity.[155] During myelination, neural fibers, called axons, are coated with a white fatty substance, called myelin, to carry information between different parts of the brain more quickly and reliably.[156] Myelination increases the efficiency of information processing and helps to integrate the frontal lobes with the areas of the brain that process emotions, rewards, and social information.[157] This efficient connection, in turn, increases self-control, enhances decision-making skills, and improves resistance to peer pressure.[158] Consequently, myelination, which continues until the mid-twenties, is positively

150. Levick et al., *supra* note 16, at 295.

151. AMA Brief, *supra* note 16, at 11–12.

152. *Id.* at 11; *see* Sang Hee Kim & Stephan Hamann, *Neural Correlates of Positive and Negative Emotion Regulation*, 19 J. COGNITIVE NEUROSCIENCE 776, 776 (2007); Kelly Anne Barnes et al., *Developmental Differences in Cognitive Control of Socio-Affective Processing*, 32 DEVELOPMENTAL NEUROPSYCHOLOGY 787, 788 (2007).

153. *See* Feld, *supra* note 32, at 519–20; *see also* Casey et al., *supra* note 141, at 68.

154. Elizabeth S. Scott & Laurence Steinberg, *Blaming Youth*, 81 TEX. L. REV. 799, 816 (2003); AMA Brief, *supra* note 16, at 12–13; *see* Feld, *supra* note 32, at 515 n.203.

155. AMA Brief, *supra* note 16, at 25; APA Brief, *supra* note 16, at 25.

156. GAZZANIGA ET AL., *supra* note 142, at 31, 48–49; GOLDBERG, *supra* note 147, at 144.

157. AMA Brief, *supra* note 16, at 26.

158. *Id.*; *see* Laurence Steinberg, *Adolescent Development and Juvenile Justice*, 5 ANN. REV. CLINICAL PSYCHOL. 459, 468 (2009).

correlated to an individual's improved ability to self-regulate their emotions and behavior throughout adolescence.[159]

3. Pruning

Pruning is the process by which the brain eliminates unused neural connections, called gray matter, so that the brain can function more efficiently.[160] As the brain prunes gray matter, information processing is strengthened, supporting improved risk assessment, impulse control, decision-making, and emotional regulation.[161] Without coincidence, pruning reaches its peak between ages ten and twenty, and the prefrontal cortex, the region most associated with controlling behavior, is one of the last regions in the brain where pruning is complete.[162]

Research into the brain's structures and functions indicate that an adolescent's brain is not as mature or functional as that of an adult.[163] Consequently, adolescents are less able to self-regulate and cognitively control their behavior, leading to impulsive and reckless decisions.[164] Along with the psychological analysis presented below, this research indicates that adolescent offenders are not as culpable as adult offenders and should be treated accordingly.

B. Developmental Psychology

1. Outside Influence

Adolescents' ability to control their impulsive behavior and regulate their emotions is highly undermined by peer pressure, trauma, and authoritative influence.[165] Vulnerability to peer pressure and authoritative influence derives from adolescents' poor self-reliance and underdeveloped self-concept.[166] Peer pressure is powerful because adolescents crave validation from others, making it more difficult for them to form an independent identity and set of values and making it

159. AMA Brief, *supra* note 16, at 26; *see* Zoltan Nagy et al., *Maturation of White Matter is Associated with the Development of Cognitive Functions During Childhood*, 16 J. COGNITIVE NEUROSCIENCE 1227, 1231–32 (2004).

160. AMA Brief, *supra* note 16, at 21; Buckingham, *supra* note 22, at 841.

161. *Id.*

162. Buckingham, *supra* note 22, at 841.

163. AMA Brief, *supra* note 16, at 6–7.

164. *Id.*

165. Levick et al., *supra* note 16, at 295–96.

166. *Id.* at 295.

easy for others to influence their decisions and behavior.[167] As a result, peer pressure prevents adolescents from fully considering the consequences and risks involved in their actions.[168]

A study by Margo Gardner and Laurence Steinberg found that when exposed to peers during a risk-taking task, adolescents doubled the amount of risky behavior that they engaged in, and even college undergraduates' risky behavior increased by 50 percent.[169]

Adolescents both act as a direct response to pressure from peers and authoritative figures and make decisions as an indirect response to their desire for approval and fear of rejection.[170] This influence causes adolescents to engage in more risky behavior, *even in the absence of direct pressure*.[171] Undoubtedly, adolescents tend to reflexively comply with authoritative figures because of their assumed superior status, leading adolescents to make decisions based on authoritative demands rather than logical reasoning or independent judgment.[172]

Moreover, when adolescents are exposed to stress and trauma, it is even more difficult for them to rationally regulate their behavior and make informed decisions.[173] Adolescents are more sensitive to even daily events, making adolescents more "emotionally volatile" than both adults and young children.[174] As a result, adolescents are not as capable of behaving as subjectively or objectively rational as adults.

2. Decision-Making

Adolescents are highly sensitive to emotional and social stimuli and, thus, less capable of making mature and thoughtful decisions than adults.[175] Adolescents are sensation-seeking and, therefore, choose to

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167. *Id.*

168. AMA Brief, *supra* note 16, at 12; Buckingham, *supra* note 22, at 834; *see also* Laurence Steinberg & Kathryn C. Monahan, *Age Differences in Resistance to Peer Influence*, 43 DEVELOPMENTAL PSYCHOL. 1531, 1531–32 (2007).

169. Steinberg, *supra* note 158, at 468–69 n.70 (citing Margo Gardner & Laurence Steinberg, *Peer Influence on Risk Taking, Risk Preference, and Risky Decision Making in Adolescence and Adulthood: An Experimental Study*, 41 DEVELOPMENTAL PSYCHOL. 625, 626–34 (2005)).

170. Levick et al., *supra* note 16, at 296.

171. *Id.*

172. *Id.*

173. Linda Patia Spear, *The Adolescent Brain and Age-Related Behavioral Manifestations*, 24 NEUROSCIENCE & BIOBEHAVIORAL REVS. 417, 423 (2000).

174. *Id.* at 429.

175. Levick et al., *supra* note 16, at 293; *see, e.g.*, Dustin Albert & Laurence Steinberg, *Judgment and Decision Making in Adolescence*, 21 J. RES. ON ADOLESCENCE 211, 217 (2011) (explaining that socioemotional stimuli has an impact on adolescent decision-making).

engage in certain behavior because of its desirable emotional outcomes and immediate rewards, despite its possible risks.[176] This sensation and reward-seeking behavior intensifies from childhood to adolescence and declines through the mid-twenties.[177] This heightened sensitivity makes adolescents less capable of predicting and appreciating negative consequences and more likely to engage in risky and criminal behavior than adults.[178] Further, adolescents have little life experience, which typically conditions an individual to engage in long-term planning and cost-benefit analysis.[179] In sum, adolescents' hindered ability to rationally make decisions during development supports the idea that adolescents are less culpable than adults for the decisions that they make.

C. Transitory Nature

Because adolescence is characterized as a time of rapid and intense change in terms of biology, emotions, cognition, and social relationships, adolescents' developmental immaturity is transitory in nature and ultimately ends in adulthood.[180] Similarly, adolescents' tendency toward reckless, risky, and criminal behavior declines as they get older.[181]

Numerous studies show that as risk-taking behavior peaks in adolescence, so does criminal engagement, and both decline simultaneously thereafter.[182] *Only a small percentage—5 to 10 percent—of juvenile offenders become "chronic" youthful offenders who continue offending into adulthood.*[183] Therefore, the large majority of youthful offenders do not grow up to become adult criminals, but instead, they are capable of parting with their criminal

176. Levick et al., *supra* note 16, at 294; AMA Brief, *supra* note 16, at 5–8.
177. Levick et al., *supra* note 16, at 294.
178. AMA Brief, *supra* note 16, at 7–8.
179. APA Brief, *supra* note 16, at 11–12; Buckingham, *supra* note 22, at 836, 840.
180. Levick et al., *supra* note 16, at 297.
181. *Id.*
182. Elizabeth Caufman et al., *How Developmental Science Influences Juvenile Justice Reform*, 8 U.C. IRVINE L. REV. 21, 26 (2018).
183. *Id.*; Levick et al., *supra* note 16, at 298–99 (citing a three-year study that followed over one thousand serious male offenders charged with felonies and only found 8.7 percent of the participants to be "persistent" offenders).

behavior and integrating successfully into society without intervention.[184]

IV. RECENT TRENDS IN JUVENILE JUSTICE REFORM

A. United States Supreme Court Decisions

Over the past decade, the Supreme Court has made decisions that have monumentally advanced juvenile justice reform.[185] The Court was guided by the neuroscience and psychology research outlining that the differences in adolescent and adult brain development diminish youthful offenders' culpability and support reduced or limited punishments and increased constitutional protections for youthful offenders.[186]

1. *Roper v. Simmons*

The first landmark decision was *Roper v. Simmons*,[187] which outlawed the death penalty for individuals who are under eighteen when the crime is committed.[188] The Court recognized that maturity differences between adult and youthful offenders make it impossible for minors to be considered among the worst offenders.[189]

Christopher Simmons was seventeen years old when he planned a murder with his two friends.[190] Just nine months after the crime, he was sentenced to death.[191] On appeal, Simmons argued that under *Atkins v. Virginia*[192] the death penalty is unconstitutional when applied to juveniles under eighteen, just as it was found unconstitutional when applied to the mentally disabled.[193] The Missouri Supreme Court agreed with Simmons and granted his appeal.[194] Justice Kennedy, joined by Justices Stevens, Souter, Ginsburg, and Breyer, affirmed,

184. Levick et al., *supra* note 16, at 298; *see also* Miller v. Alabama, 567 U.S. 460, 472–73 (2012) ("Deciding that a 'juvenile offender forever will be a danger to society' would require 'mak[ing] a judgment that [he] is incorrigible'—but 'incorrigibility is inconsistent with youth.'").
185. Root, *supra* note 42, at 32.
186. *Id.*
187. 543 U.S. 551 (2005).
188. *Id.* at 578.
189. *Id.* at 570.
190. *Id.* at 556.
191. *Id.*
192. 536 U.S. 304 (2002).
193. State *ex rel.* Simmons v. Roper, 112 S.W.3d 397, 399 (Mo. 2003) (en banc).
194. *Id.* at 413.

finding that sentencing minors to the death penalty violated the Eighth Amendment's prohibition against cruel and unusual punishment.[195]

Justice Kennedy outlined three important distinctions between minors and adults.[196] He plainly stated,

> [First], as any parent knows and as the scientific and sociological studies respondent and his amici cite tend to confirm, "[a] lack of maturity and an underdeveloped sense of responsibility are found in youth more often than in adults and are more understandable among the young. These qualities often result in impetuous and ill-considered actions and decisions." It has been noted that "adolescents are overrepresented statistically in virtually every category of reckless behavior."[197]

Second, the Court explained that "juveniles are more vulnerable or susceptible to negative influences and outside pressures," and third, their character "is not as well formed as that of an adult" and their personality traits are "less fixed."[198]

These three distinctions, the Court said, naturally support the idea that juveniles' irresponsible conduct is not as "morally reprehensible" as adults', and even the most heinous conduct does not evidence "irretrievably depraved character" in a juvenile.[199] Justice Kennedy concluded that it would be morally misguided to equate the culpability of an adult and a juvenile when science indicates that juveniles' diminished risk assessment and reckless and impulsive behavior are transitory.[200] Even more compelling, the Court stated, is that the justifications for the death penalty, retribution and deterrence, are inadequate when applied to juveniles.[201] The harshest punishments are reserved for the worst offenders, which undoubtedly are not youthful offenders,[202] and adolescents lack the heightened ability to weigh the

195. *Roper*, 543 U.S. at 554, 578–79.

196. *Id.* at 569–70.

197. *Id.* at 569 (citation omitted).

198. *Id.* at 569–70.

199. *Id.* at 570.

200. *Id.* (quoting Steinberg & Scott, *supra* note 22, at 1014) ("For most teens, [risky or antisocial] behaviors are fleeting; they cease with maturity as individual identity becomes settled. Only a relatively small proportion of adolescents who experiment in risky or illegal activities develop entrenched patterns of problem behavior that persist into adulthood . . . .").

201. *Id.* at 571–72.

202. *Id.* at 569 ("[D]ifferences between juveniles under 18 and adults demonstrate that juvenile offenders cannot with reliability be classified among the worst offenders.").

risks and envision the negative consequences of their actions, making deterrence ineffective.[203]

2. *Graham v. Florida*

The Court in *Graham v. Florida*[204] used the same rationale as it did in *Roper* when it held that juvenile non-homicide offenders cannot be sentenced to life in prison without parole (LWOP).[205] When Terrance Jamar Graham was sixteen, he and three of his friends attempted to rob a restaurant.[206] When Graham and one of his accomplices got inside, the accomplice struck the restaurant manager in the back of the head with a metal bar, and the two boys escaped in a getaway car driven by the third perpetrator.[207] Graham pled guilty and received three years of probation, one of which he served in county jail.[208] Less than six months after his release, seventeen-year-old Graham was involved in a home invasion and an attempted armed robbery.[209] The trial court found that Graham violated his probation and sentenced him to life imprisonment for the armed burglary, and fifteen years for the attempted armed robbery, the equivalent to LWOP in the state of Florida.[210] Graham appealed, arguing that his sentence was a cruel and unusual punishment in violation of the Eighth Amendment.[211]

The Court first looked at sentencing practices across the United States and found that only eleven jurisdictions imposed LWOP on juvenile non-homicide offenders, indicating a national consensus against the practice.[212] The Court also reviewed the international consensus and found that the United States was the only nation that imposed LWOP on juvenile non-homicide offenders and, along with Somalia, was the only nation that had not ratified the United Nations Convention on the Rights of the Child, which prohibits such

203. *Id.* at 572.
204. 560 U.S. 48 (2010).
205. *Id.* at 68–69, 82.
206. *Id.* at 53.
207. *Id.*
208. *Id.* at 54.
209. *Id.*
210. *Id.* at 55, 57.
211. *Id.* at 58.
212. *Id.* at 62, 64 ("[T]here are 123 juvenile nonhomicide offenders serving life without parole sentences. A significant majority of those, 77 in total, are serving sentences imposed in Florida. The other 46 are imprisoned in just 10 States—California, Delaware, Iowa, Louisiana, Mississippi, Nebraska, Nevada, Oklahoma, South Carolina, and Virginia.").

sentencing against juveniles.[213] Justice Kennedy explained that, while national and international consensuses are not the only justifications for abolishing a United States law, they are "entitled to great weight" and provide a "respected and significant confirmation" of the Court's conclusions.[214]

Justice Kennedy then used the scientific evidence analyzed in *Roper* to conclude, "[W]hen compared to an adult murderer, *a juvenile offender who did not kill or intend to kill has a twice diminished moral culpability*. The age of the offender and the nature of the crime each bear on the analysis."[215] The Court pointed out that psychology and neuroscience research show that the parts of the brain that regulate behavior continue to mature through late adolescence, making it "misguided to equate the failings of a minor with those of an adult, for a greater possibility exists that a minor's character deficiencies will be reformed."[216] Moreover, the characteristic deficiencies in adolescents are so impactful that it makes it difficult for even psychologists to differentiate between youthful offenders whose crimes are a result of the transient nature of an adolescent's immaturity, or the "rare juvenile offender whose crime reflects irreparable corruption."[217]

Referencing *Roper*, Justice Kennedy stated that "because juveniles have lessened culpability they are less deserving of the most severe punishments."[218] Ultimately, the Court found that a categorical prohibition on LWOP would give juvenile nonhomicide offenders the chance to rehabilitate and incentivize them to become responsible individuals when they reenter society.[219] As the Court wrote, "criminal procedure laws that fail to take defendants' youthfulness into account at all would be flawed."[220]

Though the Court did not address how this analysis can apply to felony murder, applying the same logic to the new California standard, a juvenile considered to have "reckless indifference to human life" still has a twice-diminished moral culpability.[221] Their culpability is once

213. *Id.* at 81.
214. *Id.* at 67, 81.
215. *Id.* at 68–69 (emphasis added).
216. *Id.* at 68.
217. *Id.* at 72–73.
218. *Id.* at 68.
219. *Id.* at 79.
220. *Id.* at 76.
221. *See* CAL. PENAL CODE § 189 (West 2019).

diminished by their age, and twice diminished because they did not kill or have intent to kill.

3. *J.D.B. v. North Carolina*

A year later, in *J.D.B. v. North Carolina*,[222] the Supreme Court found that an individual's age also informs the *Miranda* analysis when deciding whether a reasonable person would believe that they were free to terminate a police interrogation and leave.[223] J.D.B. was a thirteen-year-old student who was pulled out of class and interrogated by four adults, including a uniformed police officer and a juvenile investigator with the local police force.[224] They questioned J.D.B. for around thirty minutes about a recent home break-in that occurred in the neighborhood.[225] Although the adults knew his age, no one called his grandmother or read him his *Miranda* rights prior to questioning.[226] After J.D.B. denied his involvement in the alleged break-in, the investigator pressed J.D.B. to "do the right thing" and warned that the investigator may need to get a secure custody order if he thought J.D.B. would continue to break into homes.[227] Fearing juvenile detention from the court order, J.D.B. confessed that he and his friend were responsible for the break-ins.[228] It was not until J.D.B. confessed that the investigator told him that he could refuse to answer the investigator's questions and was free to leave.[229] When asked if he understood, J.D.B. nodded and continued giving details about the crime.[230]

In analyzing whether age has any place in custody analysis, Justice Sotomayor did not point to scientific research, instead concluding that youth is an *objective* circumstance that "generates *commonsense* conclusions about behavior and perception" and that failing to consider a suspect's age is in the custody analysis is "*nonsensical*."[231] The Court highlighted the accepted view in "[a]ll American jurisdictions . . . that a person's childhood is a relevant

222. 564 U.S. 261 (2011).
223. *Id.* at 277.
224. *Id.* at 265–66.
225. *Id.*
226. *Id.*
227. *Id.* at 266.
228. *Id.* at 267.
229. *Id.*
230. *Id.*
231. *Id.* at 272, 275 (emphasis added).

circumstance" in determining the reasonable person standard.[232] Just as the Supreme Court has reasoned time and time again, Justice Sotomayor explained that children are "less mature and responsible than adults . . . lack the experience, perspective, and judgment to recognize and avoid choices that could be detrimental to them," and are more vulnerable to outside pressures.[233] The Court in *J.D.B.* concluded that age is an essential factor in determining the mindset of a reasonable person and is routinely considered when determining liability in the torts context because a diminished capacity warrants extra protections.[234]

The decision in *J.D.B.* is significant because, regardless of what complicated scientific research concludes about the psychological and cognitive differences between adolescents and adults, it is simply commonsense that adolescents are different than adults and should be held to a different culpability standard. Using this commonsense, Justice Sotomayor still came to the same conclusion as the Court in *Roper*, in *Graham*, and, later, in *Miller v. Alabama*[235]: adolescents' immaturity provides the justification for treating them differently from adults, not only in sentencing but in all aspects of the criminal justice system.[236]

4. *Miller v. Alabama*

In the most recent Supreme Court decision concerning juvenile justice, *Miller v. Alabama*,[237] the Court made a monumental decision to outlaw sentencing structures that mandate LWOP for juvenile homicide offenders.[238] The Court found that sentencing courts instead

232. *Id.* at 274.

233. *Id.* at 272 (citations omitted).

234. *Id.* at 274–76.

235. 567 U.S. 460 (2012).

236. *J.D.B.*, 564 U.S. at 271–72; *Miller*, 567 U.S. at 471 (quoting Roper v. Simmons, 543 U.S. 551, 569 (2005) (stating that one reason adolescents have a diminished culpability compared to adults is because "children have a 'lack of maturity and an underdeveloped sense of responsibility,' leading to recklessness, impulsivity, and heedless risk-taking."); Graham v. Florida, 560 U.S. 48, 68 (2010) (quoting *Roper*, 543 U.S. at 570) ("As compared to adults, juveniles have a 'lack of maturity and an underdeveloped sense of responsibility'; they 'are more vulnerable or susceptible to negative influences and outside pressures, including peer pressure'; and their characters are 'not as well formed.'").

237. The decision was based on two cases, *Jackson v. State*, 194 S.W.3d 757 (Ark. 2004), and *E.J.M. v. State*, 928 So. 2d 1077 (Ala. Crim. App. 2004), *aff'd sub nom*. *Ex parte E.J.M. v. State*, 928 So. 2d 1081 (Ala. 2005), that the Court consolidated into one opinion. *Miller*, 567 U.S. at 465, 468.

238. *Miller*, 567 U.S. at 465.

must first consider the individual's age and the nature of the crime, youthful characteristics, background, and mental development.[239] In addition to their young age, both Miller and Jackson were subject to trauma in their living environments, and both committed acts in the presence of peers, making them more vulnerable to negative influence and criminal behavior.[240]

Kuntrell Jackson was fourteen years old when he and two other boys attempted to rob a video store.[241] Jackson had a violent family background, with both his mother and grandmother having previously shot individuals.[242] On the way to the store, Jackson learned that one of his accomplices was carrying a sawed-off shotgun.[243] Jackson decided to stay outside while the other boys entered the store.[244] One boy pointed the gun at the store clerk and the other demanded that the clerk "give up the money."[245] A few moments later, Jackson entered the store, and, "at trial, the parties disputed whether Jackson warned [the store clerk] that '[w]e ain't playin',' or instead told his friends, 'I thought you all was playin'."[246] After the clerk threatened to call the police, the boy with the gun shot and killed her.[247]

Miller was also fourteen years old at the time of his crime.[248] He had been in and out of foster care, his mother suffered from alcoholism and drug addiction, and his stepfather physically abused him.[249] He also regularly used drugs and alcohol and had previously attempted suicide four times, the first time at six years old.[250]

One night Miller was home with his friend when his neighbor delivered drugs to Miller's mother.[251] After the drug deal, Miller and his friend went to his neighbor's trailer to drink and smoke marijuana.[252] After the neighbor passed out, Miller stole his wallet.[253]

239. *Id.* at 477, 489.
240. *See id.* at 478–79.
241. *Id.* at 465.
242. *Id.* at 478.
243. *Id.* at 465.
244. *Id.*
245. *Id.*
246. *Id.*
247. *Id.* at 466.
248. *Id.* at 467.
249. *Id.* at 467.
250. *Id.*
251. *Id.* at 468.
252. *Id.*
253. *Id.*

When Miller attempted to put the wallet back in the neighbor's pocket, the neighbor woke up and grabbed Miller by the throat.[254] Miller's friend hit the neighbor with a baseball bat, which Miller eventually joined in on.[255] To cover up their crime, the boys went back to the trailer and lit two fires.[256] The neighbor eventually died from smoke inhalation and his other injuries.[257]

Both Jackson and Miller were tried as adults, and both Arkansas and Alabama law mandated that Jackson[258] and Miller[259] serve LWOP. The Supreme Court granted certiorari in both cases, and reversed both sentences[260] after analyzing the scientific evidence presented, the precedent set in *Roper*, *Graham*, and *J.D.B.*, and the American Psychological Association's brief.[261] Again, as in *Roper*, the Court found that there are three significant differences between adults and developing adolescents that diminish adolescents' culpability.[262]

The Court concluded that the mandatory sentencing schemes at issue were flawed because they sentenced defendants to one of the most severe punishments without considering a central element when considering culpability: age.[263] Sentencing schemes that impose one of the harshest prison sentences without considering youth and youth's characteristics pose a great risk of disproportionate punishment,

254. *Id.*

255. *Id.*

256. *Id.*

257. *Id.*

258. *Id.* at 466. Jackson was charged with capital felony murder and aggravated robbery. *Id.* The judge stated, "[I]n view of [the] verdict, there's only one possible punishment . . . ," and sentenced him to LWOP. *Id.* (alteration in original).

259. *Id.* at 468–69. The State charged Miller with murder in the course of arson, which carries a mandatory minimum sentence of LWOP. *Id.* at 469.

260. *Id.*

261. *Id.* at 470, 472 n.5. The Court found that the evidence of science and social science had become even stronger since *Roper* and *Graham*. *Id.* The Court quoted the APA brief, which said that it was "increasingly clear that adolescent brains are not fully mature in regions and systems related to higher-order executive functions such as impulse control, planning ahead, and risk avoidance." *Id.*

262. *Id.* at 471 ("First, children have a 'lack of maturity and an underdeveloped sense of responsibility,' leading to recklessness, impulsivity, and heedless risk-taking. Second, children 'are more vulnerable . . . to negative influences and outside pressures,' including from their family and peers; they have limited 'contro[l] over their own environment' and lack the ability to extricate themselves from horrific, crime-producing settings. And third, a child's character is not as 'well formed' as an adult's; his traits are 'less fixed' and his actions less likely to be 'evidence of irretrievabl[e] deprav[ity].'" (alterations in original) (citations omitted)).

263. *Id.* at 474, 476.

ultimately requiring the same sentence for fourteen-year-old neglected and abused children as forty-five-year-old, fully developed adults.[264]

In the concurring opinion, Justice Breyer, joined by Justice Sotomayor, went further and stated that juvenile homicide offenders should never be punished with LWOP if they do not kill or intend to kill the victim.[265] Justice Breyer quoted *Graham*, which found that juvenile offenders "who did not kill or intend to kill [have] twice diminished moral culpability" because of (1) the lack of intent; and (2) the lack of maturity and sense of responsibility, vulnerability to outside pressure, and undeveloped character "twice diminishes" their culpability.[266] The Justices recognized that felony murder cases are complicated because the question of intent is traditionally based on the intent to commit the felony.[267] However, they still found that the "transferred intent" is not sufficient to subject a juvenile to the harshest type of punishment.[268]

First, the Supreme Court does not recognize transferred intent for purposes of the Eighth Amendment.[269] *Graham*'s holding strongly implies that those who have a reckless indifference to human life are ineligible for LWOP because only those who kill or intend to kill can be constitutionally sentenced to LWOP.[270] Second, imposing the harshest sentence on a developing adolescent who did not kill or intend to kill makes no logical sense. Justice Breyer accurately stated:

> At base, the theory of transferring a defendant's intent is premised on the idea that one engaged in a dangerous felony should understand the risk that the victim of the felony could be killed, even by a confederate. Yet the ability to consider the full consequences of a course of action and to adjust one's conduct accordingly is precisely what we know juveniles lack capacity to do effectively.[271]

Ultimately, because of Jackson's twice-diminished culpability, Justice Breyer and Justice Sotomayor would not have found Jackson

264. *Id.* at 477, 479.
265. *Id.* at 490 (Breyer, J., concurring).
266. *Id.* (citing Graham v. Florida, 560 U.S. 48, 69 (2010)).
267. *Id.* at 491.
268. *Id.*
269. *Id.*; *see also* Enmund v. Florida, 458 U.S. 782, 788 (1982) (forbidding capital punishment for an aider and abettor in a robbery, where that individual did not intend to kill and simply was "in the car by the side of the road . . . , waiting to help the robbers escape").
270. *See Miller*, 567 U.S. at 491–92 (Breyer, J., concurring); *see also Graham*, 560 U.S. at 69.
271. *Miller*, 567 U.S. at 492.

eligible for LWOP, absent a finding that he killed or intended to kill the store clerk.[272] It follows that, when applied to adolescents, the felony murder rule's "reckless indifference standard" is based on even more fallacious reasoning than when applied to adults. The concurring opinion has powerful implications for the felony-murder rule's future application to adolescents and further supports that the new California standard of "reckless indifference," which does not involve a direct killing or intent to kill, is inappropriate when applied to adolescents.

5. *Montgomery v. Louisiana*

In *Montgomery v. Louisiana*,[273] the Supreme Court reviewed the Louisiana Supreme Court's decision that *Miller v. Alabama* did not apply retroactively.[274] When a case creates a substantive constitutional rule, the Constitution requires that the state collateral review court give the rule retroactive effect.[275] A new substantive constitutional rule includes both rules that forbid "criminal punishment of certain primary conduct" and prohibit "a certain category of punishment for a class of defendants because of their statutes or offense."[276] The United States Supreme Court held that the *Miller* holding was a new substantive rule that prohibited LWOP for juvenile offenders whose crimes reflect "the transient immaturity" of youth.[277] Therefore, the *Miller* rule applies to cases even if the offender was already convicted and sentenced.[278] Though the required hearing considering the sentencing factors is necessary to differentiate those whose crimes reflect a transient immaturity, and is procedural in nature, the hearing only gives effect to *Miller*'s substantive holding.[279]

The Court agreed that many crimes committed by minors are a result of their temporary developmental immaturity, rather than an "irreparable corruption."[280] Due to youthful offenders' diminished culpability, and large capacity for change, they are constitutionally different from adults, and the need to sentence youthful offenders to

272. *Id.* at 493.
273. 136 S. Ct. 718 (2016).
274. *Id.* at 727.
275. *Id.* at 729.
276. *Id.* at 732.
277. *Id.* at 735.
278. *See id.* at 731.
279. *Id.* at 735.
280. *See id.* at 734.

the harshest sentences possible is highly uncommon.[281] This holding is important because the Court recognized that considering the vulnerability and immaturity of a youthful offender is absolutely essential when determining culpability and punishments, and that courts should not exclude youthful offenders, whether their convictions are final or not, from receiving the protections that the Constitution affords them.[282] In light of the realization that LWOP sentences are almost always illogical when applied to minors, the *Montgomery* decision results in fewer LWOP sentences for minors.[283]

B. Changes in California Law

1. Proposition 57: The Public Safety and Rehabilitation Act of 2016

Proposition 57 was passed in the November 2016 election and altered juvenile criminal procedure under the California Welfare and Institutions Code (CWIC).[284] Prior to Proposition 57, prosecutors had the discretion to charge juveniles in a court of criminal jurisdiction ("adult court"), rather than in a juvenile court, as long as the juvenile was at least fourteen years old and committed a serious enumerated crime.[285] The law did not require the court to first consider relevant factors related to culpability, such as the circumstances of the crime, the juvenile's mental health, community and familial environment, or the possibility of rehabilitation.[286] Instead, this evaluation was discretionary.[287]

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281. *Id.* at 733–34.

282. *See id.* at 736.

283. *Id.* at 736–37.

284. OFFICIAL VOTER INFORMATION GUIDE FOR 2016, GENERAL ELECTION *supra* note 11, at 141–44.

285. *Id.* at 142 (allowing transfers "in any case in which a minor is alleged to be a person described in subdivision (a) of Section 602 by reason of the violation, when he or she was 16 years of age or older, of any felony criminal statute, or ordinance except those listed in subdivision (b), or of an offense listed in subdivision (b) when he or she was 14 or 15 years of age"). Reducing the likelihood that a juvenile is transferred to adult court is important because in adult court, they are more likely to receive harsher and longer sentences than they would have in juvenile court. Edward P. Mulvey & Carol A. Schubert, *Transfer of Juveniles to Adult Court: Effects of a Broad Policy in One Court*, JUVENILE JUST. BULL., (Office of Juvenile Justice & Delinquency Prevention, D.C.) Dec. 2012 at 1, 3, https://www.ojjdp.gov/pubs/232932.pdf. Further, after being sentenced, placing minors in adult prisons exposes them to heightened risk of physical, sexual, and psychological victimization, and harmful disruptions in their cognitive development. *Id.* at 1, 2.

286. *See* OFFICIAL VOTER INFORMATION GUIDE FOR 2016, GENERAL ELECTION *supra* note 11284 at 142.

287. *See id*.

Under Proposition 57, and the amended CWIC section 707, if a prosecutor wishes to charge a juvenile in adult court, the prosecutor must first make a motion to transfer the juvenile, and the juvenile court must order a probation report on the juvenile's behavioral patterns and social history.[288] Following the consideration of the report and other relevant evidence the parties wish to submit, the juvenile court must consider the mitigating criteria specified in the statute before deciding whether the juvenile should be transferred.[289] In addition to the relevant factors listed above, the court must consider the minor's

> maturity, intellectual capacity, and physical, mental, and emotional health at the time of the alleged offense, the minor's impetuosity or failure to appreciate risks and consequences of criminal behavior, the effect of familial, adult, or peer pressure on the minor's actions . . . [and] the minor's potential to grow and mature.[290]

The required factors considered under CWIC section 707 are primarily composed of the behavioral traits and cognitive abilities addressed in adolescent developmental research. In proposing the bill, it is clear that the legislature recognized the cognitive differences between adolescents and adults and how important these differences are when evaluating a youthful offender's culpability. Similarly noteworthy, among the voters' purposes for approving the bill was to "stop the revolving door of crime by emphasizing rehabilitation, especially for juveniles."[291]

2. *People v. Contreras*: Sentencing Juvenile Nonhomicide Offenders to Lengthy Sentences Violates the Eighth Amendment

In *People v. Contreras*,[292] sixteen-year-old defendants Contreras and Rodriguez forcibly raped a fifteen-year-old female and a sixteen-year-old female.[293] Rodriguez was sentenced to fifty years to life, and Contreras was sentenced to fifty-eight years to life.[294] The California Supreme Court decided that sentencing juvenile nonhomicide

288. *Id.*
289. *Id.*
290. *Id.* The statute includes a larger list of factors and evaluative procedures not quoted above, and the court can consider additional factors not enumerated in the statute.
291. *Id.* at 141.
292. 411 P.3d 445 (Cal. 2018).
293. *Id.* at 446.
294. *Id.*

offenders who committed sex offenses to lengthy sentences violates the Eighth Amendment's prohibition against cruel and unusual punishment, ultimately extending the ruling in *Graham*.[295]

As a starting point, the *Contreras* court adopted the *Graham* Court's consideration of the offender's culpability "in light of their crimes and characteristics, along with the severity of the punishment in question."[296] The court supported its holding with the three salient characteristics outlined in *Roper* and *Graham* that differentiate the culpability between juveniles and adults.[297] Further, while this case involved nonhomicide offenders, as *Graham* did, the court differentiated nonhomicide offenders by describing them as those who do not "kill, intend to kill, or foresee that life will be taken" and agreed that they are "categorically less deserving of the most serious forms of punishment than are murderers."[298] The court reasoned that when these types of offenders are juveniles, they have a "twice diminished moral culpability"[299] because juveniles have a "limited ability to consider consequences when making decisions."[300]

In the end, the court found that youths' lack of maturity and their prospect for future rehabilitation warrant a prohibition of lengthy sentences against nonhomicide offenders.[301] The court stated that, though fifty years is less harsh than LWOP, it is still "'an especially harsh punishment for a juvenile,' who 'will on average serve more years and a greater percentage of his life in prison than an adult offender.'"[302] The court asserted that *Graham* ultimately prohibited "states from making the judgment at the outset that . . . [juvenile] offenders never will be fit to reenter society."[303] In recognizing that juveniles possess the capacity for change, the court stated that the prospect of rehabilitation is not only a factor of juveniles' transient qualities of youth but also depends on the opportunities available to

295. *Id.* at 446, 448.
296. *Id.* at 451–52.
297. *Id.* at 452 (quoting Graham v. Florida, 560 U.S. 48, 67 (2010) ("[A]s compared to adults, juveniles have a 'lack of maturity and an underdeveloped sense of responsibility'; they 'are more vulnerable or susceptible to negative influences and outside pressures, including peer pressure'; and their characters are 'not as well formed.'").
298. *Id.* at 452 (quoting *Graham*, 560 U.S. at 69).
299. *Id.* at 454 (quoting *Graham*, 560 U.S. at 69).
300. *Id.* (citing *Graham*, 560 U.S. at 69).
301. *Id.* at 463.
302. *Id.* at 454 (quoting *Graham*, 560 U.S. at 70).
303. *Id.* at 453 (quoting *Graham*, 560 U.S. at 75).

juveniles when released.[304] This means that juveniles should have access to rehabilitation services, such as vocational training and education.[305] Additionally, if a juvenile is given a sentence that leaves them with no chance to leave prison for fifty or more years, a juvenile "has little incentive to become a responsible individual."[306] The court in *Contreras* ultimately recognized that sentencing less culpable juveniles to lengthy sentences circumvents the goals of the juvenile justice system and found its decision consistent with state legislation adopted in the wake of *Graham* and *Miller*.[307]

3. S.B. 1391: Prohibiting Prosecutors from Prosecuting Juveniles as Adults if They Are Under Age Sixteen

In September 2018, S.B. 1391 was passed to further the intent of Proposition 57 and amend section 707 of the CWIC once again.[308] As explained above, under Proposition 57, prosecutors could still make a motion to transfer minors from juvenile court to adult court if the minor was at least fourteen years old and was alleged to have committed a specified serious offense.[309] SB 1391 completely repealed prosecutors' authority to make a transfer motion for a fourteen- or fifteen-year-old offender unless the individual who committed the crime at fourteen or fifteen was apprehended when they were no longer within the juvenile court's jurisdiction (eighteen years old or older).[310] In sum, prosecutors are essentially prohibited from prosecuting juveniles as adults if they are under age sixteen.[311]

Along with signing S.B. 1391, Governor Jerry Brown issued a message explaining that he studied the research, data, and legislative history relevant to the bill, and ultimately concluded:

304. *Id.* at 454 (citing *Graham*, 560 U.S. at 79).

305. *Id.*

306. *Id.* (quoting *Graham*, 560 U.S. at 79).

307. *Id.* at 463. One piece of legislation the court cited was S.B. 394. *Id.* The bill extended California Penal Code section 3051 so that individuals convicted of an offense committed before they were eighteen years old and sentenced to LWOP are eligible for parole after their twenty-fifth year of incarceration. S.B. 394, 2017–2018 Leg., Reg. Sess. (Cal. 2017).

308. S.B. 1391, 2017–2018 Leg., Reg. Sess. (Cal. 2018).

309. *See supra* Section IV(B)(1).

310. S.B. 1391, 2017–2018 Leg., Reg. Sess. (Cal. 2018).

311. *See* OFFICIAL VOTER INFORMATION GUIDE FOR 2016, GENERAL ELECTION *supra* note 11, at 142. S.B. 1391 deleted the language allowing prosecutors to charge a fourteen- or fifteen-year-old minor for specific crimes and only left the section that allows prosecutors to charge sixteen-year-olds, unless they were eighteen or older when they were apprehended.

> There is a fundamental principle at stake here: whether we want a society which at least attempts to reform the youngest offenders before cosigning them to adult prisons where their likelihood of becoming a lifelong criminal is so much higher. My view is that we should continue to work toward a more just system that respects victims, protects public safety, holds youth accountable, and also seeks a path of redemption and reformation wherever possible.[312]

Governor Brown cited to the undisputed transitory nature of juveniles' reckless behavior and criminal tendencies to promote the well-reasoned idea that juveniles are the most capable of rehabilitation.[313]

C. SB 439: Individuals Under Age Twelve Cannot Be Charged for Most Crimes

Previously, CWIC section 602 read that any minor under eighteen was within the jurisdiction of the juvenile court. Under S.B. 439, signed by Governor Jerry Brown in September 2018, the individual must now be between twelve and seventeen years of age, inclusive, to fall within the jurisdiction of the juvenile court or be adjudged a ward of the court.[314]

Instead of wasting resources arresting and placing minors under twelve years old in the juvenile justice system, under the bill, counties are required to develop alternative child-serving systems to better address the underlying reasons for minors' alleged offenses.[315] These systems include child welfare, education, health care, or human services.[316] In requiring additional rehabilitative programs, the

312. Letter from Edmund G. Brown Jr., Office of the Governor (Sept. 30, 2018), https://www.gov.ca.gov/wp-content/uploads/2018/09/SB-1391-signing-message.pdf [https://web.archive.org/web/20181110212851/http:/www.gov.ca.gov/wp-content/uploads/2018/09/SB-1391-signing-message.pdf].

313. *See id.*

314. S.B. 439, 2017–2018 Leg., Reg. Sess. (Cal. 2018). There is an exception for minors under age twelve that are alleged to have committed murder or rape, sodomy, oral copulation, or sexual penetration by force, violence, or threat of great bodily harm. These offenders would still be within the juvenile court's jurisdiction. *Id.*

315. S.B. 439, 2017–2018 Leg., Reg. Sess. (Cal. 2018); Holly J. Mitchell & Ricardo Lara, *SB 439 Fact Sheet* (Mar. 17, 2017), http://www.cjcj.org/uploads/cjcj/documents/sb_439_-_fact_sheet.pdf.

316. S.B. 439, 2017–2018 Leg., Reg. Sess. (Cal. 2018); Mitchell & Lara, *supra* note 315.

legislation has recognized that psychological and developmental factors contribute to a juvenile's criminal tendency.[317]

V. LIMITING THE FELONY MURDER RULE WHEN APPLIED TO ADOLESCENTS

A. The Current Law Conflicts with Adolescent Development Research

S.B. 1437 was intended to diminish the effects of transferred intent. Narrowing the scope of the rule makes it less likely that a perpetrator will be charged with an unintentional killing. The prior felony murder rule only required proof of the murderous act and the intent to commit the felony, but did not require intent to commit the killing.[318] In contrast, S.B. 1437 requires that the perpetrator fit one of the specified sections in 189(e) of the California Penal Code before being charged with first-degree murder.[319]

However, transferred intent is still inherent in the statute. Under the third possible mental state that confers felony murder culpability, the statute looks to the perpetrator's major participation in the underlying felony, not in the killing.[320] Further, the court analyzes the perpetrator's reckless indifference in participating in the felony, not the killing, because the individual ultimately did not intend to kill.[321] Therefore, the prosecution can still piggyback on the perpetrator's felony to get to a murder charge and—even more illogical—a first-degree murder charge.[322]

As proven by scientific research, and recognized by federal and California law, adolescents have a diminished mental capacity, and consequently diminished culpability compared to adults.[323] The

317. Mitchell & Lara, *supra* note 315.

318. CAL. PENAL CODE § 189 (West 2014) (prior to S.B. 1437, 2017–2018 Leg., Reg. Sess. (Cal. 2018)).

319. S.B. 1437, 2017–2018 Leg., Reg. Sess. (Cal. 2018).

320. *Id.* ("The person was a major participant in the underlying felony and acted with reckless indifference to human life, as described in subdivision (d) of Section 190.2.").

321. *Id.*

322. Research on adolescent development strongly supports the idea that adolescents do not possess a true conscious regard for the danger of their actions compared to adults, which could support the proposition that second-degree murder should not apply to adolescents. However, this Note does not intend to take a position on that argument. The main problem with the felony murder rule is that it gives prosecutors the ability to punish an adolescent with the worst possible offense, first-degree murder, when the adolescent possesses a twice diminished capacity.

323. *See supra* Parts II–IV.

findings from *Roper* have been quoted time and time again to justify reduced sentencing and increased protections for adolescents in the criminal justice system.[324] First, as the Court stated, adolescents have an "underdeveloped sense of responsibility" compared to adults, which "results in impetuous and ill-considered actions and decisions."[325] Second, adolescents "are more vulnerable or susceptible to negative influences and outside pressures" because they have "less control . . . over their own environment."[326] Third, adolescents' character is not as well formed as that of adults.[327] As a result, adolescents' behavior is less "morally reprehensible."[328]

Following the same logic, adolescents should not be charged with the most morally reprehensible crime, first-degree murder, based on a characteristic proven by science to be inherent in adolescents: reckless indifference. Adolescents are far less likely than adults to consider or plan for the consequences of their actions.[329] Even if an adolescent was to weigh the positive and negative consequences of committing a felony, the adolescent's heightened sensitivity to immediate rewards outweighs their consideration of the potential risks involved, making them more indifferent to the potential dangers of the crime.[330]

Further, the influence of others increases the likelihood that adolescents will engage in risky behavior and is especially important in the context of felony murder.[331] Felony murder is based on applying the murderous behavior of one party to the other parties involved in the felony. *Because adolescents have a difficult time defying peers and ultimately engaging in independent thought processes when faced with outside pressures, it is irrational to charge an adolescent with a first-degree murder committed by another because they recklessly engaged in the underlying felony.*[332] In a multi-perpetrator crime, adolescents are even more likely to possess reckless indifference because they are

324. *See supra* Part IV.

325. Roper v. Simmons, 543 U.S. 551, 569 (2005) (quoting Johnson v. Texas, 509 U.S. 350, 367 (1993).

326. *Id.* (citations omitted).

327. *Id.* at 570.

328. *Id.*

329. Levick et al., *supra* note 16, at 295.

330. *Id.*

331. *See id.* at 296.

332. Root, *supra* note 42, at 64.

not only suffering from developmental immaturity but the mere presence of peers further diminishes their decision-making skills.[333]

As described above, reckless indifference is found where the perpetrator "appreciated that their acts were likely to result in" death, or could have "kn[own] death was likely to occur."[334] Therefore, under California's new felony murder rule, an adolescent can be sentenced to the harshest penalty next to death, life in prison, for failing to appreciate the serious consequences of their reckless actions.[335] This "reckless indifference" standard is flawed because science and the courts have found that adolescents cannot necessarily foresee the consequences of their actions and that, instead, adolescents innately behave recklessly.[336] As a result, an adolescent should not be charged with first-degree murder for possessing a reckless mental state.

The existing California Penal Code already provides adequate criminal charges for adolescents involved in a murder without the need for a felony murder provision. For example, if the adolescent engaged in a premeditated, deliberate, and willful killing, the state can charge the adolescent with first-degree murder.[337] If the prosecutor can prove that the adolescent possessed an intent to kill without premeditation or deliberation, then the state can charge the adolescent with second-degree murder.[338] Further, if the adolescent possessed reckless indifference to human life, then the prosecutor can attempt to convict the adolescent of second-degree murder for their alleged conscious disregard for human life.[339] Alternatively, the prosecutor can instead attempt to charge the adolescent with involuntary manslaughter if the defendant's criminal negligence in committing a non-inherently

333. *See* Levick et al., *supra* note 16, at 296.

334. *See* Tison v. Arizona, 481 U.S. 137, 152, 154 (1987).

335. *Id.* at 157 (describing a person who is "utterly indifferent to the fact that the desire to rob may have the unintended consequence of killing the victim as well as taking the victim's property").

336. *See supra* Parts II–IV.

337. People v. Chiu, 325 P.3d 972, 979 (Cal. 2018) ("First-degree murder, like second-degree murder, is the unlawful killing of a human being with malice aforethought, but has the additional elements of willfulness, premeditation, and deliberation which trigger a heightened penalty.").

338. CALJIC No. 8.30 ("Murder of the second degree is . . . the unlawful killing of a human being with malice aforethought when the perpetrator intended unlawfully to kill a human being but the evidence is insufficient to prove deliberation and premeditation.").

339. CALCRIM No. 580 (Murder is "an unlawful killing caused by a willful act done with full knowledge and awareness that the person is endangering the life in another and is done in conscious disregard of that risk.").

dangerous crime caused the death of another person.[340] If the prosecutor cannot prove any of the above, the adolescent should only be charged for the felony, while the perpetrator who actually killed the victim can be charged for murder under the appropriate murder statute. Instead, as the statute stands today, a prosecutor has the ability to charge an adolescent with first-degree murder when they simply possessed a reckless mental state in committing the felony.[341]

Though the perpetrators in *Contreras* and *Graham* were non-homicide offenders, as both courts stated, *those who do not kill, intend to kill, or foresee death, are less morally reprehensible and therefore less culpable*.[342] The courts did not simply state that murderers were different from nonmurderers. Instead, the courts specifically differentiated two groups of people by their intent and lack of intent to kill. Though a killing that results from the perpetration of a felony can be a "murder" under the felony murder statute, an adolescent involved in a felony who does not kill, intend to kill, and also does not foresee death because of their developmental immaturity, is still less culpable under the *Contreras* and *Graham* standard than one who does. Furthermore, the qualifications that the *Contreras* court and *Graham* Court used to ultimately find the defendants less morally reprehensible and deserving of shorter sentences are the same characteristics that adolescents lack when they recklessly engage in a felony that they do not intend to result in death.

The *Contreras* court acknowledged that rape is a serious crime that warrants a serious punishment.[343] Like rape, an act that results in

340. CALCRIM No. 581. A person commits involuntary manslaughter if the defendant's criminal negligence caused the death of another. A defendant acts with criminal negligence when they act in a reckless way that creates a high risk of death or great bodily injury and a reasonable person would have known that acting in that way would create such a risk. In contrast to murder, the defendant does not possess a *conscious* disregard to human life. S*ee* CAL. PENAL CODE § 192(b) (West 2015).

341. Typically, recklessness is reserved for second-degree murder. *See* CALCRIM Nos. 520, 580.

342. *See* Graham v. Florida, 560 U.S. 48, 69 (2010); People v. Contreras, 411 P.3d 445, 463 (Cal. 2018).

343. *Contreras*, 411 P.3d at 462–63 ("In so holding, we do not minimize the gravity of defendants' crimes or their lasting impact on the victims and their families. No one reading the disturbing facts of this case could disagree with the trial court that the crimes were 'awful and shocking.' The Court of Appeal was correct to observe that '[w]hatever their final sentences, Rodriguez and Contreras will need to do more than simply bide their time in prison to demonstrate parole suitability. . . . The record before us indicates Rodriguez and Contreras have much work ahead of them if they hope to one day persuade the Board they no longer present a current danger to society and should be released on parole.'").

a killing is a serious crime that should not be taken lightly. Nevertheless, an unintentional killing greatly differs from an intentional killing in a moral and logical sense. This difference warrants a lower charge and, as follows, a less severe punishment.

B. Felony Murder's Effects on Sentencing and Transfers

This Note suggests that the California felony murder "major participant" and "reckless indifference" standards should not apply to adolescents, rather than merely suggesting that adolescents should receive shorter sentences. Nevertheless, this proposition naturally affects the likelihood of the transfer of minors to adult court and adolescents' punishments if adolescents are charged with second-degree murder, involuntary manslaughter, or simply the underlying felony, rather than first-degree murder. Therefore, it is imperative to discuss the transfer and sentencing effects on minors and more broadly, adolescents.

1. Transfers

CWIC section 707 outlines the procedure of transferring a minor from juvenile court to adult court.[344] Upon a transfer, the minor is tried as an adult, given an adult sentence, and placed in an adult correctional facility.[345] Following the passage of Proposition 1391 in September 2018, only minors ages sixteen and seventeen can be tried as adults in adult court.[346] Further, before transferring the minor from juvenile court to adult court, the juvenile court must consider mitigating criteria in making its decision.[347]

Under the proposed amendments to the current felony murder scheme outlined in this Note, if a minor is charged with the underlying felony or involuntary manslaughter instead of murder, then the minor may not qualify to be transferred under CWIC section 707.[348] It is true

344. CAL. WELF. & INST. CODE § 707 (West 2019).

345. *See* Flynn, *supra* note 84, at 1057, 1059.

346. CAL. WELF. & INST. CODE § 707(a)(2) (West 2016 & Supp. 2016). Generally, the minor must be sixteen or older, but a minor who committed a crime when they were fourteen or fifteen and was not apprehended prior to their eighteenth birthday, then the prosecution can move to have the offender transferred to adult court.

347. *See id.* § 707(a)(3).

348. *See* CAL. WELF. & INST. CODE § 707(b) (West 2019) (outlining the offenses that can trigger a transfer motion). Involuntary manslaughter is not an offense that can trigger a transfer motion if the perpetrator does not use a weapon enumerated in California Welfare and Institutions Code section 16950. *See id.*

that included in the offenses that can trigger a transfer are many of the felonies outlined in the felony murder statute.[349] However, burglary is one felony that does not trigger a transfer motion but is included in the felony murder statute.[350]

Further, included in the criteria that the juvenile court must assess in deciding to transfer the minor is the seriousness of the offense.[351] Therefore, even if a charge of the underlying felony could allow the prosecutor to file a transfer motion, the lesser offense of the felony, instead of murder, will weigh against transferring the minor. Moreover, even a second-degree murder charge can reduce the likelihood that that juvenile court decides to grant the transfer motion when compared to a first-degree murder charge.

Transfers are important because transferred minors may receive longer and harsher sentences in adult court, and minors are at an increased risk of experiencing physical, sexual, and psychological victimization and harmful disruptions in their cognitive development.[352] Ultimately, transferring a minor to adult court characterizes them as adults twice: first, by finding the youthful offender culpable enough to be transferred to adult court, next by holding the youthful offender to the same adult standard when charging them with a crime. Just appearing in an adult court creates the illusion that the individual's conduct is more culpable.

Further, the juvenile justice system's primary goal is to rehabilitate the minor during the time of their lives when their identities are most amenable to change.[353] A critical consideration in sentencing a minor is the chance that the minor will be rehabilitated

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349. *See* CAL. PENAL CODE § 189(a) (West 2019) (including "arson, rape, carjacking, robbery, burglary, mayhem, kidnapping, train wrecking, or any act punishable under Section 206, 286, 288, 288a, or 289, or murder that is perpetrated by means of discharging a firearm from a motor vehicle, intentionally at another person outside of the vehicle with the intent to inflict death" as felonies that trigger first-degree felony murder); CAL. WELF. & INST. CODE § 707(b) (West 2016 & Supp. 2019) (listing murder, arson, robbery, rape, sodomy, kidnapping, discharge of a firearm, carjacking, and acts under section 288, 289 as offenses that qualify to file a transfer motion).

350. *See* CAL. PENAL CODE § 189; CAL. WELF. & INST. CODE § 707(b) (West 2019).

351. CAL. WELF. & INST. CODE § 707(a)(3)(E)(i) (West 2016 & Supp. 2019) ("The circumstances and gravity of the offense alleged in the petition to have been committed by the minor.").

352. Mulvey & Schubert, *supra* note 285, at 3–6

353. CAL. WELF. & INST. CODE § 202 (West 2016) (stating that the purpose of the juvenile courts is to "provide for the protection and safety of the public" while providing juveniles with "protective services . . . care, treatment, and guidance consistent with their best interest" and the "rehabilitative objectives" of the code); Henning, *supra* note 20, at 1122.

and will reenter society as a law-abiding citizen.[354] However, adult facilities are not designed to foster identities outside the prison walls, and placing youthful offenders in adult facilities creates a dangerous environment that exposes youthful offenders to heightened stress and trauma.[355]

Changing the way that the state charges minors can reduce transfers. As a result, youthful offenders will have an increased chance of rehabilitating and will be less likely to reoffend.[356] Studies show that minors who are transferred, compared to those who were not transferred, are more likely to reoffend, and reoffend more quickly.[357] Therefore, limiting transfers will allow more minors to start a promising life once they complete their sentences.

2. Sentencing

In California, an involuntary manslaughter charge results in imprisonment of between two and four years.[358] A robbery charge can result in two to nine years.[359] A second-degree murder conviction results in fifteen years to life in a state prison.[360] A conviction of first-degree murder, at a minimum, results in imprisonment for twenty-five years to life.[361] *Consequently, charging an adolescent with second-degree murder, involuntary manslaughter, or the underlying felony, instead of first-degree felony murder can shave off at least ten years, and up to a lifetime in prison from a youthful offender's sentence, ultimately increasing the chances for rehabilitation.*[362] Further, while

354. Graham v. Florida, 560 U.S. 48, 68 (2010) (stating that it is "misguided to equate the failings of a minor with those of an adult, for a greater possibility exists that a minor's character deficiencies will be reformed").

355. *See* Mulvey & Schubert, *supra* note 285, at 5.

356. *See id.* at 3–5, 7.

357. *Id.* at 7 (describing study conducted in Florida and a study performed in Pennsylvania).

358. CAL. PENAL CODE § 193 (West 2014). These sentence estimates are based on the California Penal Code, and those charged as adults. Juveniles charged in juvenile court will not receive state prison sentences but can be placed in the Department of Corrections and Rehabilitation, Division of Juvenile Facilities. CAL. WELF. & INST. CODE § 731.

359. CAL. PENAL CODE § 213.

360. *Id.* § 190. If the individual previously served time in prison for murder, a second murder charge can result in life imprisonment without parole. CAL. PENAL CODE § 190.05 (West 2019). However, this would not apply to an adolescent who, realistically, could not have already served time for a murder before age twenty-five.

361. CAL. PENAL CODE § 190 (West 2014) ("Every person guilty of murder in the first-degree shall be punished by death, imprisonment in the state prison for life without the possibility of parole, or imprisonment in the state prison for a term of 25 years to life.").

362. *Id.* As stated, the minimum sentence for second-degree murder is fifteen years and the minimum sentence for first-degree murder is twenty-five years.

Miller prohibited a *mandatory* LWOP sentence scheme for minor homicide offenders, after a minor is found guilty of murder, and the court considers the circumstances of the crime, the court can still sentence the minor to LWOP.[363]

The courts and legislature have already established that imprisoning juveniles for extended periods of time contradicts the goals of the juvenile justice system: rehabilitation and reintegration.[364] As described in *Graham*, juveniles have a once diminished moral culpability because of their age, and those "who did not kill or have intent to kill," have a twice-diminished moral culpability.[365] If this twice diminished culpability rationale is used when deciding whether a sentencing practice is harsh, it makes even more sense to apply the rationale when deciding that a criminal charge is too harsh to apply to youthful offenders. The crime is ultimately what brought the youthful offender to the point of sentencing. Therefore, it follows that charging adolescents with first-degree murder based on a "reckless indifference" standard does not comport with the foundational pillars of the juvenile justice system or the basics of adolescent development.

C. Felony Murder Justifications Are Even More Baseless When Applied to Adolescents

The felony murder rule has two justifications: deterrence and retribution.[366] These two purposes promote the idea that "bad actors" should be severely punished for engaging in a dangerous felony that results in social harm.[367]

In theory, the rule will deter individuals from carelessly committing felonies and participating in dangerous felonies in the first place.[368] *However, unintentional or unforeseeable acts cannot possibly be deterred.*[369] The only study of the felony murder rule's deterrent effect found little to no deterrent effect and, in some instances, even found that the rule increases felony deaths.[370] Instead

363. Miller v. Alabama, 567 U.S. 460, 465, 480 (2012).
364. *See* People v. Contreras, 411 P.3d 445, 462 (Cal. 2018).
365. Graham v. Florida, 560 U.S. 48, 69 (2010).
366. Flynn, *supra* note 84, at 1063.
367. *Id.*
368. *See id.*
369. *See id.* at 1064.
370. Anup Malani, *Does the Felony-Murder Rule Deter? Evidence from FBI Crime Data*, at 6, 25 (2002) (unpublished manuscript), http://www.nytimes.com/packages/pdf/national/malani.pdf ("[W]ithout the felony murder rule, if a robbery victim died accidentally, the robber has a strong

of charging the perpetrator with murder, increasing the punishment of the underlying intentional felony can have the same, if not greater, deterrent effect.[371]

Further, due to adolescent cognitive development, the United States Supreme Court continues to recognize that deterrence is not effective in the adolescent context.[372] Because adolescents have "a lack of maturity, an underdeveloped level of responsibility," and have a tendency to engage in impulsive and reckless actions, they are less likely to consider the possible punishments when making decisions.[373] Therefore, "the same characteristics that render juveniles less culpable than adults suggest . . . that juveniles will be less susceptible to deterrence."[374]

Therefore, if an adolescent inherently possesses a reckless character and rarely considers the immediate consequences of their actions, a first-degree murder charge based on reckless indifference will not deter the adolescent from engaging in reckless behavior that results in unforeseen consequences. Even if an adolescent does weigh the risks involved, an adolescent's vulnerability to outside pressure, heightened sensitivity to rewards, and tendency to underappreciate risks increase the chances that an adolescent will still engage in the risky behavior.[375]

Moreover, studies suggest that there is no significant difference in the deterrence effect of a death penalty and LWOP sentence because adolescents lack foresight and pay more attention to short-term gratification than long-term consequences.[376]

A deterrence justification also assumes that the felonious individual understands the risks inherent in their actions and is aware of the severe punishment they will face for any death that results from

incentive to avoid intentionally causing additional deaths because his punishment would increase from a robbery sentence to a murder sentence. [But] [w]ith the rule, after causing the accidental death," the "increment in punishment" for a second murder is smaller, decreasing the disincentive to intentionally take additional lives.).

371. *Id.* at 25; Flynn, *supra* note 84, at 1064.

372. Miller v. Alabama, 567 U.S. 460, 472 (2012); Graham v. Florida, 560 U.S. 48, 72 (2010); Roper v. Simmons, 543 U.S. 551, 571 (2005).

373. *Graham*, 560 U.S. at 72.

374. *Id.* (quoting *Roper*, 543 U.S. at 571).

375. Levick et al., *supra* note 16, at 295.

376. ABA Brief, Miller v. Alabama, *supra* note 18, at 18; *Less Guilty by Reason of Adolescence*, MACARTHUR FOUND. RES. NETWORK ON ADOLESCENT DEV. & JUV. JUST. (2006), http://www.adjj.org/downloads/6093issue_brief_3.pdf.

the felony.[377] Instead, it is unlikely that the perpetrator knows that they are engaging in what is considered a felony under the California Penal Code, and it is even more unlikely that they know that the felony murder rule exists or how it functions, especially if the perpetrator is an adolescent.[378]

A retribution justification provides that a criminal sentence is proportional to the criminal's culpability.[379] However, the felony murder rule holds the defendant responsible for any death that results from their involvement in the felony, even if they did not intend to cause any harm.[380] Measuring punishment based on resulting harm equally punishes individuals who accidently kill, and those who intentionally kill. Consequently, two very different types of perpetrators receive the same sentence that is "traditionally [only] reserved for the most culpable offenders."[381]

The felony murder rule's retribution justification is even more irrational when applied to adolescents. The purpose of retribution is to proportionally punish an individual based on their culpability.[382] However, the scientific findings cited in recent court decisions and legislation state that adolescents possess a twice-diminished culpability when compared to adults.[383] Therefore, punishing an adolescent without considering their individual characteristics ignores these crucial findings. Adolescents should be punished in line with not only the harm that resulted but also their diminished culpability due to their youth. As a result, adolescents should not be charged with first-degree murder based on a "reckless indifference" standard, and their youthful characteristics should be considered before they can be charged with second-degree murder based on a felony murder theory.

D. Youthful Offenders, Reformation, and Rehabilitation

While applying the felony murder rule to adolescents under age twenty-five directly conflicts with scientific research, applying the rule to individuals under eighteen further conflicts with the goals of

377. Keller, *supra* note 25, at 305; *Contra Less Guilty by Reason of Adolescence*, *supra* note 376, at 2.

378. *See* Roth & Sundby, *supra* note 43, at 452.

379. Keller, *supra* note 25, at 311.

380. *See* Flynn, *supra* note 84, at 1064.

381. *Id.* at 1065.

382. *Id.* at 1063, 1065.

383. *Supra* Part IV; Flynn, *supra* note 84, at 1072.

the juvenile justice system. The primary purpose of having a juvenile justice system separate from adult criminal court is to reform and rehabilitate youthful offenders.[384] Because minors are far less likely to have an "irretrievably depraved character" than adults, rehabilitation in juvenile detention centers gives minors a chance to reform and productively reenter society.[385] Therefore, charging a minor with first-degree murder, a charge that inevitably comes with a lengthy or lifelong sentence, for possessing recklessness has no place in California law.

Further, research shows that the developmental immaturity that contributes to adolescents' reckless behavior is transitory, and when given the opportunity, adolescents are capable of change.[386] Due to increased development during adolescence, as risk-taking behavior peaks, so does criminal engagement, but both simultaneously decline thereafter.[387] Accordingly, numerous studies have found that only a small percentage—5 to 10 percent—of youthful offenders become "chronic" juvenile offenders who continue offending into adulthood.[388] The large majority of youthful offenders do not grow up to become adult criminals but, instead, are capable of parting with their criminal behavior and integrating successfully into society as law-abiding citizens.[389] Research indicates that developmental immaturity is the major factor that distinguishes youth who persist in crime and those who do not, and that once developmental immaturity is accounted for, age may not have a direct effect on crime.[390] Because youthful offenders' developmental maturity contributes to their

384. Daniel P. Mears et al., *Public Opinion and the Foundation of the Juvenile Court*, 45 CRIMINOLOGY 223, 226 (2007).

385. Graham v. Florida, 560 U.S. 48, 68 (2010); Roper v. Simmons, 543 U.S. 551, 570 (2005).

386. Levick et al., *supra* note 16, at 298.

387. Peter W. Greenwood, *Responding to Juvenile Crime: Lessons Learned*, 6 FUTURE OF CHILD. 75, 77–78 (1996); Caufman et al., *supra* note 182, at 26.

388. Greenwood, *supra* note 387, at 77–78; Levick et al., *supra* note 16, at 297 (citing a study that found that "chronic" juvenile offenders with five or more arrests only make up approximately 6 percent of the juvenile offender population). The Pathways to Desistance Study, a longitudinal study of over 1,000 felony-offenders, also found that fewer than 10 percent of the participating youth persisted in high-level offending after seven years. Caufman et al., *supra* note 182, at 27.

389. Caufman et al., *supra* note 182, at 27.

390. Kathryn C. Monahan et al., *Trajectories of Antisocial Behavior and Psychosocial Maturity from Adolescence to Young Adulthood*, 45 DEVELOPMENTAL PSYCHOL. 1654, 1665 (2009); *see* Gary Sweeten et al., *Age and the Explanation of Crime, Revisited*, 42 J. YOUTH AND ADOLESCENCE 921, 934–35 (2013) (explaining that age acts as a "proxy" for criminality).

criminal tendencies, punishing them for their inherent "reckless indifference" is harsh and counterproductive.

Imprisoning adolescents for the majority, if not all, of their lives because they possessed recklessness that was caused by developmental immaturity, and almost positively would have dissipated with age, does not give adolescents an opportunity to change. As *Graham* and *Miller* stated, not even rehabilitation can justify a sentence of life without parole because such a sentence eliminates a rehabilitative possibility by keeping the individual expelled from society forever.[391] Ultimately, charging an adolescent with first-degree murder for "reckless indifference" ignores the developmental difference between adolescents and adults and the proven transitory nature of an adolescent's reckless character and contradicts current jurisprudence.

E. Methods for Change

There are at least three possible ways that California can limit the felony murder rule as applied to adolescents: (1) prosecutorial policy changes; (2) judicial decisions in the California or United States Supreme Court; or (3) California legislative action. These three avenues would limit the application of the felony murder rule so that, under the "reckless indifference" standard outlined in the felony murder rule, (a) adolescents cannot be charged with first-degree murder; and (b) a judge must analyze the adolescents' culpability using the factors listed in CWIC section 707 before adolescents can be charged with second-degree felony murder.

As stated above, charging an adolescent with first-degree murder for possessing a "reckless indifference" equates an adolescent's and an adult's culpability and is incompatible with recent jurisprudence recognizing that an adolescent possesses a weak ability to make informed and rational decisions.[392] Further, charging an individual with second-degree felony murder under a reckless indifference standard still allows the state to analyze the individual's major participation in the felony and reckless indifference in engaging in the

391. Miller v. Alabama, 567 U.S. 460, 473 (2012) (stating that rehabilitation could not justify a sentence of life without parole because it "forswears the rehabilitative ideal" because it reflects "an irrevocable judgment about [an offender's] value and place in society," at odds with a child's capacity for change" (quoting Graham v. Florida, 560 U.S. 48, 72–74 (2010))).

392. Root, *supra* note 42, at 60–61.

felony.[393] Therefore, the adolescent with alleged reckless indifference will still be punished for their decision to engage in the felony, and not necessarily the murder. Instead, as proposed in this Note, the adolescent's culpability should be assessed before charging them with murder instead of the underlying felony.

1. Prosecutorial Policy Changes

Under the first avenue, district attorneys' offices can implement a prosecutorial policy that limits the way prosecutors charge adolescents under the felony murder rule. This policy would prohibit prosecutors from charging adolescents with first-degree felony murder under the amended California Penal Code section 189 based on the "reckless indifference" standard. In recognizing an adolescent's diminished cognitive capacity, the policy would also encourage prosecutors to pursue involuntary manslaughter or simply felony charges, instead of murder charges, when an adolescent engages in a dangerous felony that that they did not intend to result in death.

Implementing a new policy could be easier and faster than waiting for the legislature to pass an amended statute or waiting for the California Supreme Court or United States Supreme Court to issue a policy-changing decision. However, such a policy is unstable. Either the Chief Prosecutors from each county or the California Attorney General could implement the policy. If the Attorney General or Chief Prosecutors implement the policy, it could easily be revoked with the election of a new Chief Prosecutor or Attorney General who does not agree with the policy. Implementing policies by county would also likely result in inconsistent policies across California, with adolescents receiving more protection in some counties than others due to the political climate. Further, policies are guidelines, as opposed to hard rules that prosecutors are mandated to follow, like a legislative statute or judicial decision. Without having a law requiring them to do so, it would be difficult to prohibit prosecutors from charging adolescents with first-degree felony murder and to require prosecutors to consider certain factors before charging an adolescent with second-degree felony murder.

393. *Id.* at 27.

2. Judicial Decisions in the California or United States Supreme Court

As a second option, the California or United States Supreme Court could rule on the issue.[394] However, in order to amend the felony murder rule through the judiciary, there must be a case that presents a clear violation of either the California Constitution or United States Constitution. Like in *People v. Contreras*, the California Supreme Court could decide that charging an adolescent with first-degree murder under a "reckless indifference" standard is considered cruel and unusual punishment in violation of the Eighth Amendment.[395] The court could find that the sentence given to those convicted of first-degree murder is unjustifiably long for an adolescent with a twice-diminished capacity. Further, the court could decide that factors associated with adolescence must be considered before charging an adolescent with second-degree felony murder.

The recent trend in United States Supreme Court jurisprudence has been to recognize adolescents' unique characteristics that make them less capable of making informed decisions, more vulnerable to outside pressures, and less culpable than adults.[396] This trend creates hope that the courts will appreciate the problems with the current felony murder rule, especially as applied to adolescents. However, using this method would take a great deal of time. It would require finding a case with relevant facts and precedential value to litigate up to the California or United States Supreme Court.

3. California Legislative Action

The third, and likely best, option is through the California legislature.[397] Just as the felony murder rule was amended under S.B.

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394. In People v. Aaron, the Michigan Supreme Court abolished the common law felony murder rule. 299 N.W.2d 304, 329 (Mich. 1980). With the Michigan Supreme Court finding that the felony murder rule had no place in Michigan, one justice stated:

> The Court has correctly outlined the injudicious and unprincipled premises on which the common-law doctrine of felony murder rests. The basic infirmity of the felony-murder rule lies in its failure to correlate, to any degree, criminal liability with moral culpability. It permits one to be punished for a killing, with the most severe penalty in the law, without requiring proof of any mental state with respect to the killing. This incongruity is more than the state's criminal jurisprudence should be permitted to bear.

Id. at 334 (Ryan, J., concurring in part, dissenting in part).

395. People v. Contreras, 411 P.3d 445 (Cal. 2018).

396. *Supra* Part IV.

397. Michigan, Kentucky, and Hawaii have all abolished the felony murder rule by amending their murder statutes. KY. REV. STAT. ANN. § 507.020 (West 2019); HAW. REV. STAT. ANN. § 707-

1437, the California legislature can pass a new bill that limits the felony murder rule when applied to adolescents. California Penal Code section 189 would be amended to include a subdivision (g) excluding adolescents from subdivision 189(e)(3), which charges an individual with first-degree felony murder based on the "reckless indifference" standard.[398] The new section would state that subdivision (e)(3) does not apply to a defendant who is under the age of twenty-five and that before charging an adolescent with second-degree murder under a felony murder theory, the judge must analyze the defendant's culpability using the same factors listed in CWIC section 707.

Like Proposition 57, S.B. 1391, and other recent legislature in juvenile justice reform, it is important to create a bright line age cutoff.[399] While eighteen is the age that "draws the line for many purposes between childhood and adulthood" and presents a compromise to prosecutors' potential push-back, the research that courts and legislatures rely on in protecting youthful offenders is based on the conclusions that individuals' thoughts, actions, and emotions continue to mature throughout their early twenties.[400] Therefore, the cutoff that would most effectively protect youthful offenders would be age twenty-five.

As mentioned, pushback from prosecutors may limit the possibility of legislative action. Just as prosecutors challenged S.B. 1437, they likely will challenge a bill further limiting the felony murder rule.[401] Though going through the state legislature always

701 (West 2016); People v. Aaron, 409 Mich. 672 (1980) (eliminating the felony murder rule in Michigan); Kevin E. McCarthy, *OLR Research Report*, Connecticut General Assembly, Feb. 13, 2008, https://www.cga.ct.gov/2008/rpt/2008-r-0087.htm. Ohio effectively eliminated the felony murder rule by replacing felony murder with an involuntary manslaughter statute. *See* OHIO REV. CODE ANN. § 2903.01 (West 2019); McCarthy, *supra*. In the commentary to Hawaii's amendment, the Hawaii legislature stated, "Engaging in certain penally-prohibited behavior may, of course, evidence a recklessness sufficient to establish manslaughter, or a practical certainty or intent, with respect to causing death, sufficient to establish murder, but such a finding is an independent determination which must rest on the facts of each case." Commentary on § 707-701, Hawaii State Legislature, https://www.capitol.hawaii.gov/hrscurrent/Vol14_Ch0701-0853/HRS0707/HRS_0707-0701.htm.

398. CAL. PENAL CODE § 189(e)(3) (West 2019).

399. *See* S.B. 1391, 2017–2018 Leg., Reg. Sess. (Cal. 2018) (setting age sixteen as the youngest age of minors who can be transferred to adult court unless the minor committed the offense when they were fourteen or fifteen years old but they were not apprehended prior to turning eighteen).

400. Roper v. Simmons, 543 U.S. 551, 568–69 (2005); *see* AMA Brief, *supra* note 16, at 3.

401. *See* Jessica Pishko, *Hundreds Stuck in Prison in California as Prosecutors Seek to Block New Law*, APPEAL, (Mar. 25, 2019) https://theappeal.org/hundreds-stuck-in-prison-in-california-as-prosecutors-seek-to-block-new-law/. The period of time between twelve and twenty-five years old is a period that psychologists have defined as a period of heightened development. *See* Steinberg

depends on the political climate at the time, it appears to be the fastest and most stable way of making the much-needed amendment. Further, based on legislative action in juvenile justice reform in 2018, the legislature seems to be supportive of additional protections for youthful offenders despite prosecutors' pushback.[402]

VI. CONCLUSION

The felony murder rule should be restricted so that an adolescent cannot be charged with first-degree murder by simply possessing a "reckless indifference to human life." Allowing a first-degree murder charge based on a lower mental culpability "erodes the relation between criminal liability and moral culpability," especially when applied to adolescents.[403] Further, an amended felony murder rule should require that a judge assess the adolescent's culpability characteristics, much like they are before transfers under CWIC section 707, before an adolescent is charged with second-degree felony murder under the reckless indifference standard. In the alternative, prosecutors could try to charge such adolescents with involuntary manslaughter or the underlying felony.

A prosecutor should not be able to charge an adolescent with one of the most morally reprehensible crimes based on the adolescent's decision to engage in a felony that resulted in unforeseen consequences. Instead, a prosecutor should be required to prove that the adolescent's act and mental culpability fit within the appropriate murder statute, while analyzing the felony separately. Similar to the reasoning used by the Hawaii legislature in abolishing the felony murder rule, the decision to engage in a felony may be a factor in determining recklessness under a second-degree murder or manslaughter charge, but that determination should be made on a case by case basis, rather than mandated by a broad sweeping statute.[404]

& Schwartz, *supra* note 3, at 27 ("[M]ost identity development takes place during the late teens and early twenties."); Waterman, *supra* note 3, at 355 ("The most extensive advances in identity formation occur during the time spent in college.").

402. *See* S.B. 1391, 2017–2018 Leg., Reg. Sess. (Cal. 2018); S.B. 1437, 2017–2018 Leg., Reg. Sess. (Cal. 2018); S.B. 439, 2017–2018 Leg., Reg. Sess. (Cal. 2018).

403. People v. Dillon, 668 P.2d 697, 709 (1983).

404. Further, while the felony murder rule is arguably illogical even when applied to adults, limiting the felony murder rule as applied to adolescents is a crucial first step needed to quickly conform to the current jurisprudence and to advance juvenile justice reform.

Further, charging a minor with a murder because of a supposed recklessness in committing a felony undermines the goals of the juvenile justice system. As data suggests, the felony murder scheme does not meet the supposed objectives of deterrence and rehabilitation.[405] The United States Supreme Court, California legislature, and California courts continue to make decisions that further protect youthful offenders in the criminal justice system. As discussed, in prohibiting courts from sentencing nonhomicide offenders who did not kill, intend to kill, or foresee death to lengthy sentences, the court in *Contreras* recognized the developmental and behavioral differences between adolescents and adults. In addition, the passing of SB 1391 amended a proposition that already protected minors and once again raised the age permitted to transfer a juvenile to adult court. The bill acknowledged that minors do not belong in adult criminal court because their reckless nature is transitory, and shorter sentences and a rehabilitative environment will more effectively decrease their criminal behavior.[406]

The California courts and legislature are willing to afford adolescents more protection because science has indicated that adolescents and adults are cognitively different, and thus, adolescents are less culpable. Using the same rationale employed time and time again, not only in California but in the United States Supreme Court, California should take the next logical step in recognizing that adolescents have a diminished cognitive capacity and should limit the application of the felony murder rule when applied to adolescents.

405. *See supra* Section V(D).
406. Letter from Edmund G. Brown Jr., *supra* note 312.

Follow-up email from Joanna Scheer, June 30, 2020

Thank you, Tom. Regarding your question as to how many people in CDCR are doing LWOP for felony murder special circumstances, there is NO data … anywhere … period. Everyone who is serving LWOP has been convicted of first degree murder and that is the how the data is listed...simply as first degree murder. Also, everyone who is serving a sentence of LWOP has been convicted of a special circumstance; however, there is no breakdown as to how many were convicted of felony murder special circumstances. The 4 to 1 ratio alluded to in the last page of my letter makes an inference as to how many may be serving LWOP as aiders and abettors under felony murder.

Our bill in 2016, AB 2195, addressed this lack of important data by requiring the California Department of Justice (DOJ), in consultation with the CDCR, to collect data on the number of persons currently convicted of and sentenced for first degree and second degree murder under the felony murder rule. The bill also required DOJ to disaggregate the data by county and continue to update the data annually. Unfortunately, AB 2195 died in Appropriations. It's appalling that there is no data on such a large population serving this death sentence in California. Over the last 5 years, I've worked closely with Caitlin O'Neil in the Legislative Analyst's Office to see how we could "back into" this data, but we haven't yet discovered a way.

Please let me know if you have any further questions, Tom, and thanks again for your consideration.

My best to you,
Joanne

Exhibit B

Email from Sheila Pinkel, June 24, 2020

I zoom a lot and have never had problems with the audio. And I didn't even have a chat hand so that I could write something. I have quite a few questions:

1. I work with many groups in So Cal but mainly with JusticeLA and CURB. We have been trying to figure out how to get judicial accountability. Someone on the panel mentioned the huge range of judicial decisions generated for the seemingly same issue. Our group is trying to create a way to assess judges because at the moment there doesn't seem to be any oversight over them. So, my question is: **How can judicial decisions of individual judges become transparent to the public so that an analysis of judicial decisions can take place?**

2. One of the judges on the panel today commented that he could see no way to improve the way the courts handle pre-trial detainees for misdemeanors. My question is: **How about using transformative justice to adjudicate low level crime during the pre-trial detention phase and then expunge records once the parties have come to a settlement.**

3. I know that this body is concerned with improving the penal code for better outcomes. My question: **Don't you think that low level crimes would be reduced if there were a more equitable distribution of wealth in the country?**

4. Is it possible to hold the police to the same standard of culpability that the rest of the population is held? My question: **Can police be held financially responsible for the crimes they commit instead of taxpayers and also held legally responsible? Can this be added to the penal code?**

5. Today the New Yorker had an informative article about bail reform. My question: **Is it possible to change the penal code so that there is zero bail for misdemeanors and low level felony offenses?**